CHAPTER 6
URBAN OPERATIONS

The first and most fundamental lesson learned from recent operations in built-up areas is the value of the fully integrated combined-arms team. The value of infantry forces during urban combat is undeniable, but urban combat by units composed entirely of infantrymen is an historical anomaly. Across the spectrum of combat action in urban areas, powerful combined-arms teams produce the best results. Commanders at all levels must determine the actual composition of these teams based on a careful analysis. Infantry units operating alone suffer from critical shortcomings that they can overcome only by appropriate task organization with other branches to achieve a combined-arms effect. These forces must be supported by closely integrated armor, aviation, direct and indirect fire support, communications, and logistical elements.

Section I. GENERAL PLANNING CONSIDERATIONS

This section highlights the basic urban operation planning considerations for SBCT infantry company commanders.

6-1. EMPLOYMENT CONSIDERATIONS FOR COMPANY-SIZE COMBINED-ARMS TEAMS

Because of the decentralized nature of urban combat and the need for a high number of troops to conduct operations in dense, complex terrain, infantrymen will always represent the bulk of forces. At the small-unit tactical level, however, infantry forces have disadvantages that can be overcome by mechanized infantry or armor units. Conversely, vehicles face problems in the confines of urban areas which place them at a severe disadvantage when operating alone, unsupported by infantry. Only by working together can these forces accomplish their missions with minimal casualties while avoiding unnecessary collateral damage.

a. **Infantry Strengths.** The infantry has the following strengths in an urban environment:

(1) Infantry small-arms fire within a building can eliminate resistance without seriously damaging the structure.

(2) Infantrymen can move stealthily into position without alerting the enemy. Infantrymen can move over or around most urban terrain, regardless of the amount of damage to buildings.

(3) Infantrymen have excellent all-round vision and can engage targets with small-arms fire under almost all conditions.

(4) Infantrymen can clear severely restricted terrain that is not readily accessible to other forces.

b. **Mobile Gun System Strengths.** The MGS has the following strengths in an urban environment:

(1) The thermal sights on the MGS vehicle can detect enemy activity through darkness and smoke, conditions that may limit even the best-equipped infantry.

(2) The MGS vehicle can deliver devastating fires; is fully protected against antipersonnel mines, fragments, and small arms; and has excellent mobility along unblocked routes.

(3) The MGS vehicle projects a psychological presence, an aura of invulnerability that aids the friendly forces in deterring violence. Mounted patrols by MGS vehicles can monitor large areas of a city while making their presence known to the entire populace, both friendly and unfriendly.

(4) The mobile, protected firepower of MGS vehicles can add security to resupply convoys. The MGS vehicle's smoke-generation capability can aid in extracting wounded personnel and other small-unit actions.

c. **Infantry Carrier Vehicle Strengths.** The ICV has the following strengths in an urban environment:

(1) The ICV can provide protection to the infantry by negating the effects of enemy small-arms weapons, either by driving soldiers up to a building or by acting as a shield while the infantry moves behind it along a street.

(2) ICVs can resupply units quickly and with more ammunition than resupply by foot.

(3) Because of their armor protection, ICVs can be used to conduct CASEVAC under fire.

d. **Infantry Limitations.** Infantry forces have the following limitations in an urban environment:

(1) They lack heavy supporting firepower.

(2) Exposed infantry forces are subject to taking a high number of casualties.

(3) Infantry forces are more subject to fratricide-related casualties from friendly direct and indirect fire.

e. **Mobile Gun System Limitations.** The MGS has the following limitations in an urban environment:

(1) Crewmen in MGS vehicles have poor all-round vision through their vision blocks, which are easily degraded by smoke or dust.

(2) If isolated or unsupported by infantry, MGS vehicles are vulnerable to enemy teams firing light and medium antiarmor weapons.

(3) Elevation and depression limitations of the main gun limit the gunner's target acquisition capabilities in urban terrain. When operating in narrow streets or confined areas, the vehicle commander or dismounted infantry must assist the MGS gunner in acquiring targets.

(4) Improvised barricades, narrow streets and alleyways, or large amounts of rubble can block armored vehicles.

(5) Due to the length of the main gun, the turret will not rotate if a solid object such as a wall or post is in its path.

(6) Heavy fires from MGS vehicles cause unwanted collateral damage and can destabilize basic structures.

f. **Infantry Carrier Vehicle Limitations.** The ICV has the following limitations in an urban environment:

(1) If buttoned up, crewmen in ICVs have poor all-round vision through their vision blocks; they are easily blinded by smoke or dust.

(2) The ICV has only a local defense weapon system mounted. Once the infantry has dismounted and is not supporting the vehicle, its firepower is diminished.

(3) The ICV is vulnerable to anything other than small arms and particularly to AT weapons.

6-2. EMPLOYMENT OF INFANTRY AND MGS VEHICLES

An effective use of armored combat vehicles in most tactical situations is en masse. Armored units operating in platoon, company, and battalion strength combine mobility, protection, and firepower to seize the initiative from the enemy and greatly aid friendly success. However, urban combat is often so decentralized, and avenues of approach for vehicles so canalized, that massed armored combat vehicles cannot be effectively employed. Thus, the urban situation may call for fewer armored combat vehicles employed over broader areas. The decision to disperse rather than mass armored combat vehicles should be made only after a careful consideration of the factors of METT-TC, the situation, and the anticipated operations in the near future. Decentralized armored combat vehicle support greatly increases a dismounted infantry unit's combat power, but dispersed vehicles cannot be easily and quickly concentrated. If not well planned, the sudden removal of armored combat vehicles from throughout the area will necessitate a tactical pause for reorganization and a change of tactical tempo, which could disrupt the ongoing combat operation at a critical time.

a. **Mobile Gun System Employment.** The MGS can support infantry during urban combat operations (Figure 6-1, page 6-4) by--

- Providing shock action and firepower.
- Isolating objectives with direct fire to prevent enemy withdrawal, reinforcement, or counterattack.
- Neutralizing or suppressing enemy positions with smoke, HE, and automatic weapons fire as infantry closes with and destroys the enemy.
- Assisting opposed entry of infantry into buildings when enemy fire, debris, or obstacles block doorways.
- Smashing through street barricades or reducing barricades by fire.
- Obscuring enemy observation using on-board smoke generators.
- Holding cleared portions of the objective by covering avenues of approach.
- Attacking by fire any targets designated by the infantry.
- Establishing roadblocks or checkpoints.
- Suppressing identified sniper positions.

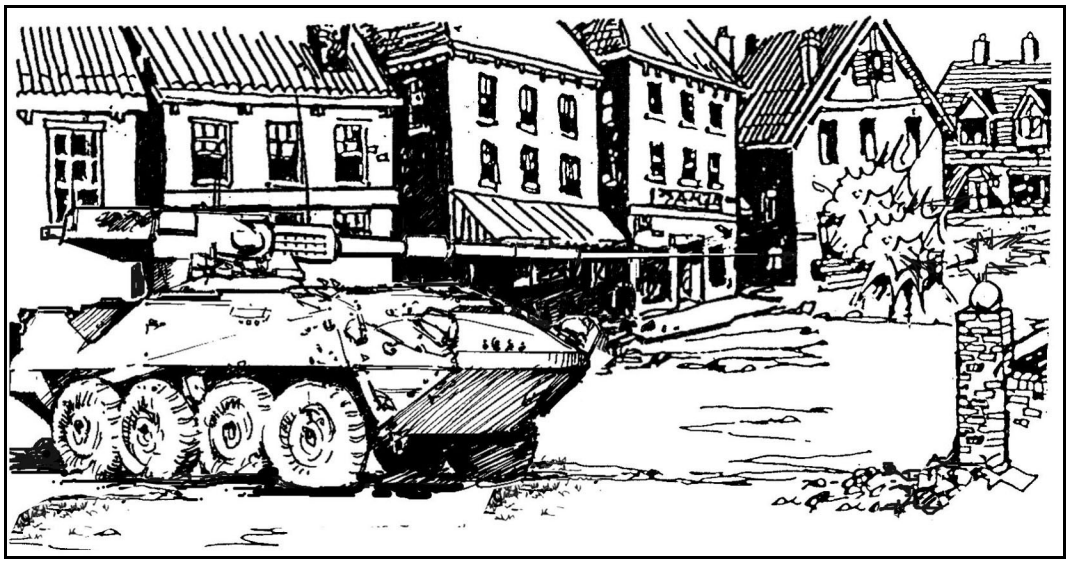

Figure 6-1. MGS in direct fire, supported by infantry.

b. **Task Organization at Company Level.** The SBCT infantry company has an organic MGS platoon. There are three basic techniques of task-organizing the MGS platoon for urban combat. Based on the factors of METT-TC, the commander may attach engineers, a sniper or sniper team, an ICV and rifle squad, or a rifle squad or fire team to the MGS platoon for a specific mission.

(1) ***MGS Platoon Retained under Company Control.*** In this technique (Figure 6-2), the MGS platoon leader is responsible for maneuvering the MGS vehicles IAW the company commander's intent. With this task organization, likely missions for MGS vehicles are to support by fire or to overwatch movement of the infantry. This task organization poses the most difficulty in maneuvering the MGS with the dismounted infantry. However, it provides greater flexibility in supporting the infantry during the close fight.

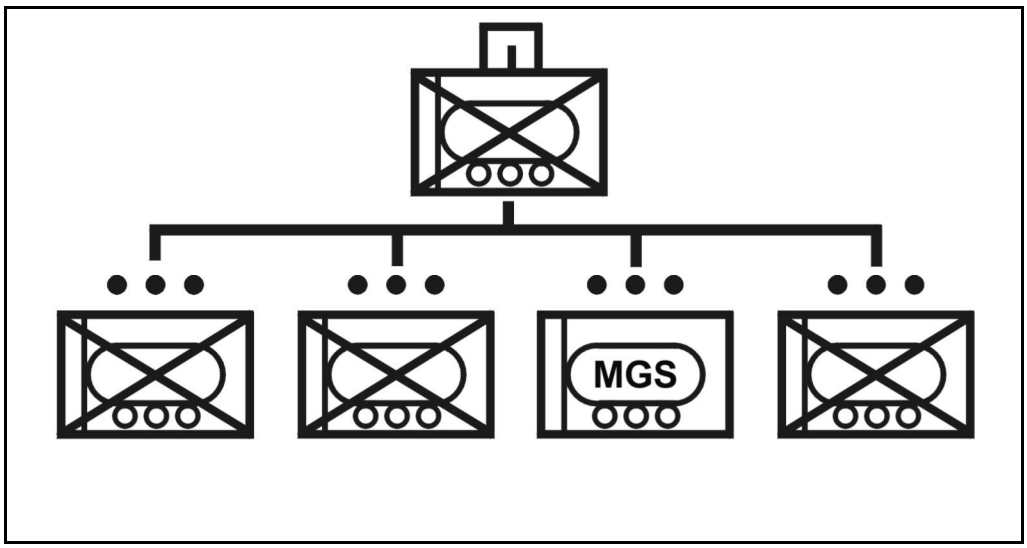

Figure 6-2. MGS platoon under company control.

(2) ***MGS Platoon(-) under Company Control and an MGS Vehicle under Infantry Platoon Control.*** The MGS platoon detaches one vehicle to infantry platoon control. With this technique (Figure 6-3), the selected maneuver infantry platoon has an MGS vehicle available to support the close fight, and the company commander has an MGS platoon (-) to deploy at the critical place and time of his choosing. This task organization still allows support to the infantry close fight while keeping additional support options for the company commander to employ. The disadvantages to this technique are that an infantry platoon leader, rather than the MGS platoon leader, maneuvers MGS vehicles, and the number of MGS vehicles directly available to the company commander is reduced.

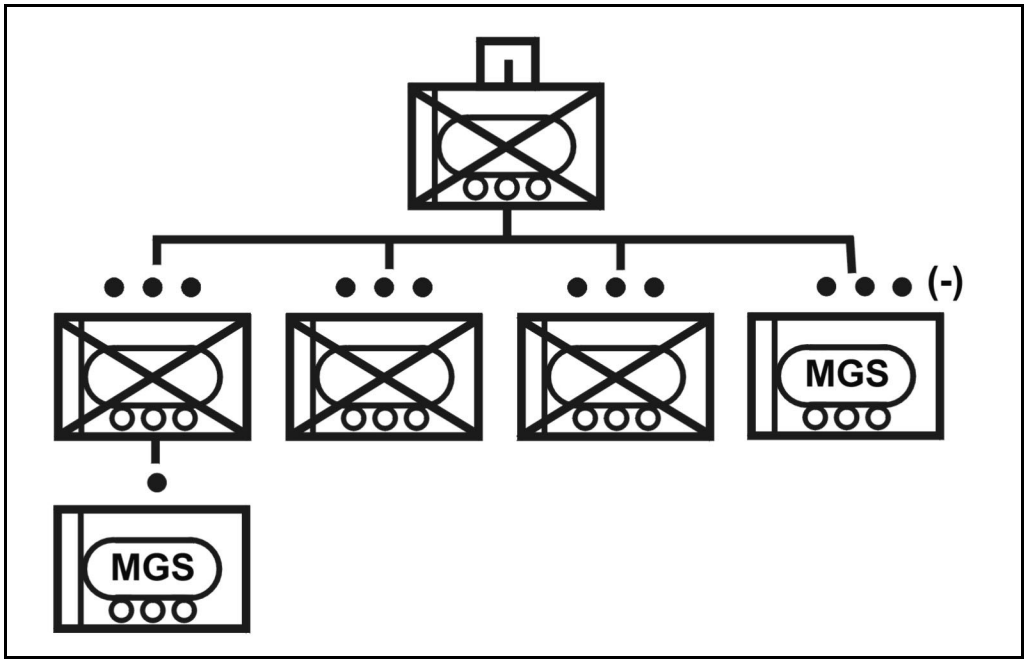

Figure 6-3. MGS platoon(-) under company and an MGS vehicle under infantry platoon control.

(3) ***Individual MGS Vehicles under Infantry Platoon Control.*** In this technique (Figure 6-4, page 6-6), each one of the MGS vehicles is task-organized to an infantry platoon. The purpose of this type of task organization is to provide all the infantry platoons with increased direct fire for suppression and breaching, specifically in an urban area. Leaders must ensure that the infantry platoon secures the MGS vehicle at all times.

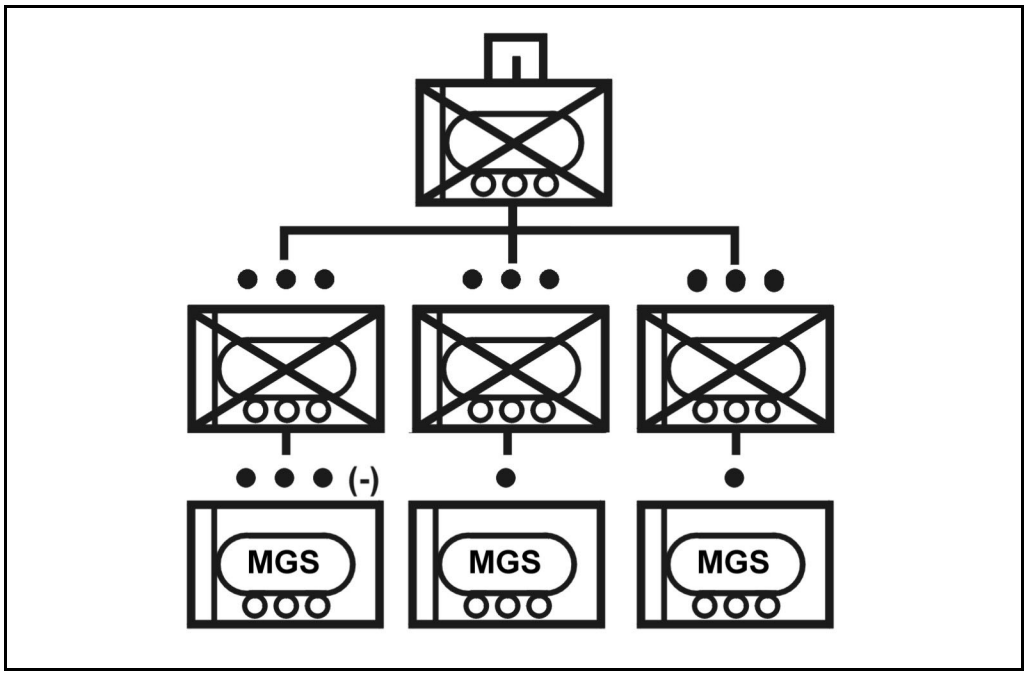

Figure 6-4. Individual MGS vehicles under infantry platoon control.

(4) ***Selection of a Technique.*** None of the techniques described above is inherently better than the others. The task organization has to be tailored to accomplish the mission. Regardless of the technique selected, the following guidelines apply:

- Single MGSs may operate in support of infantry; however, it is preferable for MGSs to support each other.
- If using MGS vehicles or ICVs to shield squads and teams moving from building to building as part of the maneuver plan, the leader of the forward element needs to control the MGS vehicles.
- If the SBCT infantry company commander controls the MGS, he needs to move forward to a position where he can effectively maneuver the MGS in support of the infantry.
- The task organization should support the span of control. If the company commander controls the MGS platoon, then he does not task-organize them to the infantry platoons.
- MGSs need infantry support when the two elements are working together. Do not leave vehicles (ICVs or MGSs) alone; they are not prepared to provide local security during the operation. MGS vehicles are extremely vulnerable to dismounted attack when operating in an urban environment.

c. **Mutual Support.** Infantry ICV and MGS teams work together to bring the maximum combat power to bear on the enemy. The infantry provides the eyes and ears of the team, locating and identifying targets for the MGSs or ICVs to engage. Infantry and ICVs move along covered and concealed routes to assault enemy elements fixed or suppressed by MGS fire. Squads provide protection for the MGS against attack by enemy infantry. Meanwhile, an MGS provides heavy, continuous supporting fires against enemy strongpoints.

d. **Movement.** The dismounted infantry normally leads SBCT infantry company movement through built-up areas. The MGS vehicles and ICVs follow and provide close overwatch. If the infantry discovers an enemy position or encounters resistance, the MGS responds immediately with supporting fire to fix the enemy in place or suppress him and allow the infantry to develop the situation. After sufficient time to develop the situation or conduct short-range reconnaissance, the infantry squad leader directs the MGS to move, if necessary, and identifies specific targets for the MGS to engage.

e. **Coordination.** Coordination between MGSs and infantry leaders must be close and continuous. The MGS vehicle commander may need to dismount and move, accompanied by the infantry squad leader, to a position where he can see the route or target better. Everyone must understand the signals for initiating, shifting, or lifting fires. One of the greatest barriers to coordination and command and control in urban combat is the intense noise. Simple, nonverbal signals should back up verbal commands.

f. **Communications.** The MGS platoon leader and platoon sergeant must maintain communications with the SBCT infantry company commander. Individual MGS vehicles and infantrymen communicate with one another using one or more of the following techniques:

(1) ***Visual Signals.*** Visual signals, either prescribed by SOP or coordinated during linkup, can facilitate some simple communications.

(2) ***External Phone.*** All MGS vehicles have external phones that aid in the communication between the MGS crew and the infantry.

(3) ***FM Radios.*** FM radios provide a reliable means of communications between infantry and supporting vehicle commanders. These radios allow the infantry to use terrain more effectively in providing close-in protection for the MGS; infantrymen can watch for enemy elements while limiting exposure to enemy fires directed against the MGS. Signal operating instruction (SOI) information can be used between the MGS platoons and the company headquarters or infantry platoons. This is a fast and reliable method of communications that does not require additional assets.

NOTE: The SBCT infantry company commander relies on the radio to help control the battle. It is essential for platoon leaders and RATELOs to be well trained in sending reports. Constant reporting from the subordinate elements to the commander is critical for mission success.

g. **Smoke.** The MGS vehicle's on-board smoke generation system and its smoke grenade projectors may be used both to protect the MGS from enemy observation and to provide concealment for the infantry forces as they either move across open areas or recover wounded personnel. The use of smoke must be carefully coordinated. Although the MGS vehicles' sights can see through most smoke, infantrymen are at a significant disadvantage when enveloped in dense smoke clouds. The smoke grenade launchers on the MGS provide excellent, rapidly developed local smoke clouds, but the grenades produce burning fragments that are hazardous to infantrymen near the MGS and can ignite dangerous fires in urban areas.

h. **Heavy Direct Fire Support.** MGS vehicles and ICVs are valuable tools for helping assaulting forces isolate the objective area and seize a foothold. As the infantry then moves to clear the position and expand the foothold, the MGSs remain in their initial

support-by-fire positions. When possible, MGSs should move to subsequent positions where their fires can prevent enemy reinforcement and engage enemy forces withdrawing from the objective. At this time, the MGS crew must be very alert. Because of the nonlinear nature of urban battles, enemy forces may move to the rear or flanks of the now-isolated MGS vehicles and destroy them. If a small element of infantry cannot be spared to support the MGS, then vehicles (MGS or ICV) should move to positions of cover and mutual support. Crews should be alert, especially for enemy infantry approaching from above, from the rear, or from the flanks.

i. **Other Considerations.** The following considerations also apply when operating in an urban environment:

(1) In planning, pay close attention to available terrain that will support MGS and ICV cross-country movement. While the pace may be slower, cross-country movement may significantly enhance security.

(2) Involve the MGS platoon leader and PSG in the mission analysis. Their expertise hastens the understanding of what MGS vehicles can and cannot do and aids the SBCT infantry company commander in making the best MGS employment decision.

(3) MGSs and ICVs can carry ammunition, water, and other supplies to support the urban fight.

(4) SBCT infantry company commanders must specifically allocate time in the planning process for precombat inspections (PCIs) for the vehicles.

(5) Conduct a combined-arms rehearsal at the level where the vehicles are task-organized. Try to replicate conditions for mission execution during rehearsals, such as day, limited visibility, civilians on the battlefield, host nation support, and ROE. Include the following:

- Graphic and fire control measures.
- Direct fire plans.
- Communications.
- Breach drills.
- Techniques for using vehicles as infantry shields.

(6) The following measures minimize casualties when moving outside or between buildings:

(a) Cover all possible threat locations with either observation or fire.

(b) For those areas not possible to cover with observation or fire, use smoke to set a screen to block enemy observation of friendly movement.

(c) Move MGS vehicles forward to support infantry movement. Position the MGS before the infantry begins moving, whether the MGSs are supporting by fire, being used as shields, or both.

(d) Preplan positions if possible, but devise a marking system and communication signals to designate situation-dependent positions to help maintain momentum. (For example, “The VS-17 panel from Building 2 means move to support by fire 3.”)

(e) When using vehicles as a shield for infantry, move the vehicles as close to the start point as possible to allow the infantry freedom of movement when exiting the building.

(f) Vehicles need to move at the infantry’s rate of movement.

(g) When the distance between buildings is short, position vehicles to protect the infantry from enemy small-arms fire.

(7) Use simple, clearly understood graphic control measures. The following are particularly useful for operations in urban combat (Figure 6-5):

- Phase lines.
- Number and lettering systems for buildings.
- Tentative support-by-fire positions.
- No-fire areas.

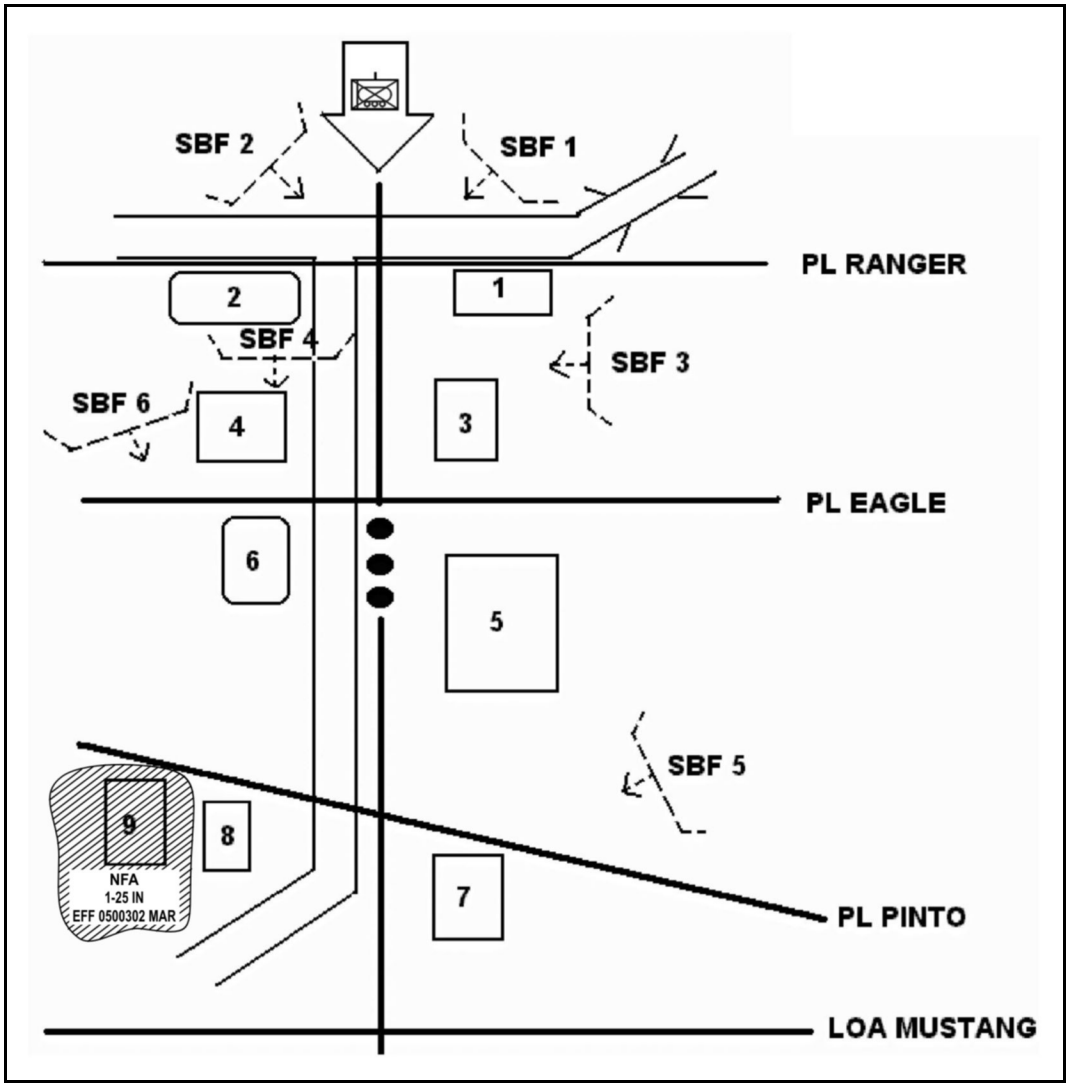

Figure 6-5. Graphic control measures.

Section II. OFFENSE

Offensive operations in urban areas are based on offensive doctrine modified to conform to the urban terrain. Urban combat imposes a number of demands that are different from ordinary field conditions, such as problems with troop requirements, maneuver, and use of equipment. As with all offensive operations, the company commander must retain his ability to fix and maneuver against enemy positions.

6-3. GENERAL OFFENSIVE CONSIDERATIONS

Combat operations in a built-up area have a slower pace and tempo than operations in open terrain. Unlike in open terrain, SBCT infantry companies cannot maneuver platoons quickly. Due to the close environment and the restricted ability to use all available weapons systems, synchronization of maneuver and combat support assets is one of the SBCT infantry company commander's main challenges. Missions in UO are more methodical. Normally, the infantry company conducts missions as part of a battalion operation, but the SBCT infantry company must be prepared to operate independently. The company must also be prepared to conduct different but mutually supporting missions simultaneously, such as establish a checkpoint and clear a block at the same time.

a. **Troop Requirements.** Due to the nature of combat in built-up areas, more troops are normally needed than in other combat situations. This is due to the number of tasks required: clear buildings, provide security, control civilians, and evacuate casualties (the probability of casualties is greater in UO).

(1) Because of the need to clear buildings and provide security, the number of troops required to accomplish an offensive mission is much greater. To prevent enemy forces from repositioning or counterattacking friendly forces, some forces must remain in a building once it is cleared.

(2) Commanders must also consider soldier fatigue. Room clearing techniques are physically demanding and quickly tire a force. Commanders must plan for the relief or rotation of their forces before they reach the point of exhaustion.

(3) Additional forces may be needed to control civilians in the built-up area. These forces must protect civilians, provide first aid, and prevent them from interfering with the tactical plan.

(4) Fighting in a built-up area normally results in a greater number of friendly casualties. The ability to see the enemy is fleeting and confined to very short ranges compared to combat in open terrain. Fratricide can become a serious problem and must be addressed in detail by the commander. Plan for CASEVAC and instruct subordinate units to conduct this task.

b. **Maneuver.** Unlike in open terrain, the complex nature of the urban environment makes it difficult for commanders to maneuver their SBCT infantry company and its attachments quickly. Clearing buildings and looking for antiarmor ambushes, snipers, and booby traps degrade the ability of the company to maneuver platoons and squads. Due to the dense environment and its effects on weapons systems, the synchronization of combat power is one of the commander's main challenges. Offensive operations must be planned in detail, with subordinate elements given specific instructions and on-order missions.

c. **Limitations.** SBCT infantry company commanders attacking a built-up area must recognize some important limitations in the use of available assets:

(1) Normally, the use of indirect fires, especially field artillery, is much more restricted in built-up areas than in open terrain. Leaders must consider the effects of indirect fire on the urban area and civilians, especially when extremely restrictive ROE are in effect. When indirect fires are authorized, they must be fired in greater mass to achieve the desired effect.

(2) The rubbling caused by massive indirect fires adversely affects a unit's ability to maneuver during the attack.

(3) The commander and leaders must consider the effect that city lights, fires, and background illumination have on night vision devices. These elements may limit the effectiveness of NVDs and make thermal imagery identification difficult.

(4) Communications equipment may not function to its maximum effectiveness because of the density in building construction. Therefore, intelligent use of graphic control measures and an understanding of the SBCT commander's intent (two levels up) become more important to mission accomplishment.

6-4. METT-TC FACTORS

The SBCT infantry company commander's analysis of the factors of METT-TC is critical for successful planning and execution during UO.

a. **Mission.** The SBCT infantry company commander must receive, analyze, and understand the mission before he begins planning. He and his troops must clearly understand the conditions of the operation--either precision or high intensity--and the ROE. The company commander may be required to conduct different missions simultaneously.

(1) ***Common Missions.*** SBCT infantry companies should expect to receive similar types of offensive missions in urban terrain that they receive in other terrain. The following are common company missions in urban combat:

(a) *Isolation of an Urban Objective*. The SBCT infantry company normally conducts this mission as part of an SBCT battalion. The SBCT infantry company deploys its platoons to secure the area around or near a building, block, or village in order to kill or capture any withdrawing enemy forces and prevent reinforcement of or a counterattack against the objective. Engineers or other CS and CSS assets may reinforce the company based on the ROE and factors of METT-TC. In view of the fact that many casualties may be inflicted on friendly units moving between buildings or down streets, this mission takes on significant importance.

(b) *Assault of a Building*. SBCT infantry companies normally conduct this mission as part of an SBCT battalion operation when the building is too large for a platoon to assault and clear and the enemy defending the building requires a force larger than a platoon. The company must enter the building, gain a foothold, and clear the building. The SBCT battalion commander normally directs another SBCT infantry company (or other companies) to isolate the building. Engineers or other CS and CSS assets usually reinforce the SBCT infantry company consistent with the ROE and the factors of METT-TC.

(c) *Attack of a Block or Group of Buildings*. SBCT infantry companies may attack a block or group of buildings. Again, the company normally conducts this mission as part of a battalion operation. If the company attacks a block as part of a battalion operation, it may be the battalion's main or supporting effort. Another friendly unit may isolate the objective, or the company may find that it must isolate the objective area in whole or in part. If an infantry company receives the mission to assault a block independently, then the company must isolate the objective area by itself.

(d) *Movement to Contact*. SBCT infantry companies in UO may move through urban terrain in order to gain and maintain contact with the enemy. Because the urban environment makes movement very challenging and the buildings reduce the capabilities of FBCB2, the company must make extra efforts to gain situational understanding (SU).

This mission typically includes movement (often rapid) through an urban area to develop the situation by seizing or clearing blocks and buildings.

(e) *Hasty Attack of a Village*. SBCT infantry companies may conduct a hasty attack of a village either independently or as part of an SBCT infantry battalion operation. The purpose of this mission is normally to reduce enemy control of a position and facilitate movement for other operations.

(f) *Seizure of Key Urban Terrain*. SBCT infantry companies may seize key terrain in order to provide an advantage to friendly forces. Key terrain may be overpasses, building complexes, traffic circles, surrounding natural terrain or bridges, and so forth. The SBCT infantry company usually conducts this mission independently to facilitate movement or other operations.

(g) *Raids*. SBCT infantry companies may perform raids on urban terrain, which they plan similar to raids on other terrain. Objectives may be located in built-up areas, and the company may have to move through urban and other terrain in order to arrive at the objective. The company normally conducts this mission independently, but it may also conduct a raid in support of a battalion area raid (see Chapter 4).

(2) ***Analysis of Mission.*** When conducting his analysis, the SBCT infantry company commander must consider his battalion commander's intent and the end state of the operation. For example, the company commander must determine if clearance means every building, block by block (systematic clearance), or if the seizure of key terrain requires clearing only along the axis of advance (selective clearance). The company commander must also consider how and where the company must be postured in order to conduct follow-on missions and to facilitate the battalion and brigade missions. This influences the missions he gives to his platoon and attached element leaders.

(a) When the company is involved in clearing operations, bypassing buildings increases the risk of attack from the rear or flank unless planned support isolates and suppresses those buildings. Normally, the clearing platoons must not only enter, search, and clear each building in the company's zone of action but also leave security behind to prevent reoccupation of buildings. This may not be feasible due to the nature of the mission, but if it is part of the plan, it should be made clear to the platoon leaders when orders are issued.

(b) The battle can transition quickly from precision to high intensity conditions, a transition that may be caused by enemy actions. An assault against a deliberate, prepared defense with obstacles becomes high intensity. Indications of an enemy-forced change of ROE (and a change from precision conditions to high intensity) include--

- The requirement to breach multiple obstacles.
- The use of booby traps by the enemy.
- The requirement to use repetitive explosive breaching to enter a building.
- Rooms that are so well prepared or barricaded that normal movement and clearing techniques cannot be employed.

(3) ***Movement.*** Moving from building to building or between buildings presents a problem to platoons. Historical examples, recent operations in Somalia, and the Russian experience in Grozny have shown that many casualties occur during movement from building to building and down streets. Therefore, SBCT infantry company commanders should plan operations in a manner that allows subordinate elements to take maximum advantage of covered and concealed routes within the urban area. Additionally, company

commanders must carefully analyze which buildings must be isolated, suppressed, and obscured, consistent with the ROE. They may use the MGS platoon and, if attached to mechanized units, any available tanks and Bradley fighting vehicles (BFVs) as shields for maneuvering platoons.

(4) ***Coordination of Fire Support.*** Most fire support coordination occurs at battalion level to take into account the ROE. Prior coordination determines the techniques and procedures to use for communicating, identifying targets, and shifting fires. The FIST chief should be extensively involved in this portion of the planning process. The company must plan fires consistent with the ROE, giving extra consideration to civilians, houses of worship, medical centers, schools, public services, and historical monuments. (See Chapter 10 for further details about combat support assets.)

b. **Enemy.** Key factors that affect the SBCT infantry company commander's analysis are the type of enemy force that is expected in the urban area, the enemy's probable courses of action, and the ROE. More restrictive ROE work to a defender's advantage; conversely, less restrictive ROE work to an attacker's advantage. The type of threat is one factor used to determine how the company should be task organized and how combat power should be synchronized to accomplish the mission. Additionally, the company commander must determine if there are any asymmetrical threats that may affect the company's mission. For example, if the company has the mission to safeguard (seize) a water treatment facility that is determined to be key terrain, the commander needs to consider possible threats to the facility that may not be direct force-on-force actions.

(1) ***Conventional Forces.*** Many third world countries have adopted techniques of urban combat from either the United States or the Commonwealth of Independent States. Therefore, a future threat may consider the motorized or mechanized rifle battalion the most effective unit for urban combat because of its inherent mobility, armor protection, and ability to adapt buildings and other structures for defense quickly.

(a) In countries that have forces equipped and trained as in the former Warsaw Pact, there are standard urban defenses:

- Threat defenses are organized into two echelons to provide greater depth and reserves.
- Company strongpoints are prepared and form the basis for the battalion defensive position.
- The reserve is located in a separate strongpoint.
- Ambush locations are established in the gaps of the strongpoints, and dummy strongpoints are constructed to deceive the attacker.
- Positions for securing and defending the entrances to and exits from underground structures and routes are established.
- Security positions are prepared forward of first echelon defensive positions.
- A motorized or mechanized rifle company may defend several buildings or a single large building with mutually supporting fires.
- Each platoon defends one or two buildings, or one or two floors of a single building.

(b) In many third world countries, the forces are predominantly light with some outdated armored vehicles. Some countries may not have actual armed forces but have some form of armed militia(s). These forces normally do not fight a defense in the former

Warsaw Pact style, but rather offer uncoordinated resistance, often extremely intense, as experienced in Somalia.

(2) ***Unconventional (Asymmetric) Forces.*** Enemy analysis is similar to that for low intensity conflict during urban counterinsurgency, counterguerrilla, and counterterrorist operations.

c. **Terrain.** Offensive operations must be tailored to the urban environment based on a detailed analysis of each urban terrain setting, its types of built-up areas, and existing structural forms. Commanders and subordinate leaders must incorporate the following special planning considerations for an urban environment when conducting an offensive operation:

- Military maps that may not provide enough detail for urban terrain analysis nor reflect the underground sewer system, subways, underground water system, mass transit routes, and utility facilities. (When available, the commander should utilize building or city plans, engineering prints, aerial photographs, tourist maps, or other aids that may assist him in his analysis of the terrain.)
- Natural terrain surrounding the built-up area.
- Key and decisive terrain (stadiums, parks, sports fields, school playgrounds, public buildings, media facilities, and industrial facilities).
- Construction and structural composition of buildings.
- Confined spaces that limit observation, fields of fire, and maneuver and prevent the concentration of fires at critical points.
- Covered and concealed routes to and within the built-up area.
- Limited ability to employ maximum combat power due to the need to minimize damage and rubbling effects (based on ROE).
- Problems with conducting effective reconnaissance during conventional operations. Reconnaissance by force is the most effective reconnaissance means, ROE permitting. This method involves probing a defense with successively larger units until enemy positions are disclosed and can be successfully attacked. During unconventional (asymmetric) operations or operations under restrictive ROE, the opposite is true. Reconnaissance and security are more easily accomplished by both sides and are more difficult to prevent.
- ROE that limit the use of firepower.
- Significant numbers of civilians who may have to be evacuated, some forcibly. Civilians may hinder operations on purpose or merely by their presence.

d. **Troops Available.** An SBCT infantry company normally participates in an attack as part of an attacking SBCT battalion. In this case, the company may have to isolate the objective or seize a foothold. If the objective is a smaller built-up area, a company may be required to accomplish the entire mission independently, assigning required tasks to its platoons or squads. In either case, the maneuver platoons accomplish these tasks. The company mortar section normally supports the assault by providing indirect fire support. (See Chapter 10 for detailed discussion of assets the company commander may have available.)

(1) ***MGS Vehicles.*** MGS vehicles may support by fire when lead units are seizing a foothold. During the attack of a built-up area, MGS vehicles overwatch the infantry's initial assault until an entry into the area has been secured. ICVs or MGS vehicles need the support of infantry in order to suppress enemy strongpoints and ATGMs while they move into overwatch positions. The commander must employ MGS vehicles to take advantage of the range of their main armament and their armored protection. He should also consider bringing the vehicles forward to secure a foothold or breach exterior walls for the infantry. He bases this decision on the ROE and the effectiveness of enemy antiarmor fires.

(2) ***Direct Fire Artillery.*** If available, towed 155-mm howitzers can use direct fire to destroy bunkers, heavy fortifications, or enemy positions in reinforced concrete buildings (Figure 6-6). The towed 155-mm howitzer may also clear or create avenues of approach. Whenever artillery is used in the direct fire role, it must be close to the infantry providing security against enemy ground attack. Prior coordination is necessary so the bulk of the field artillery unit's shells are HE.

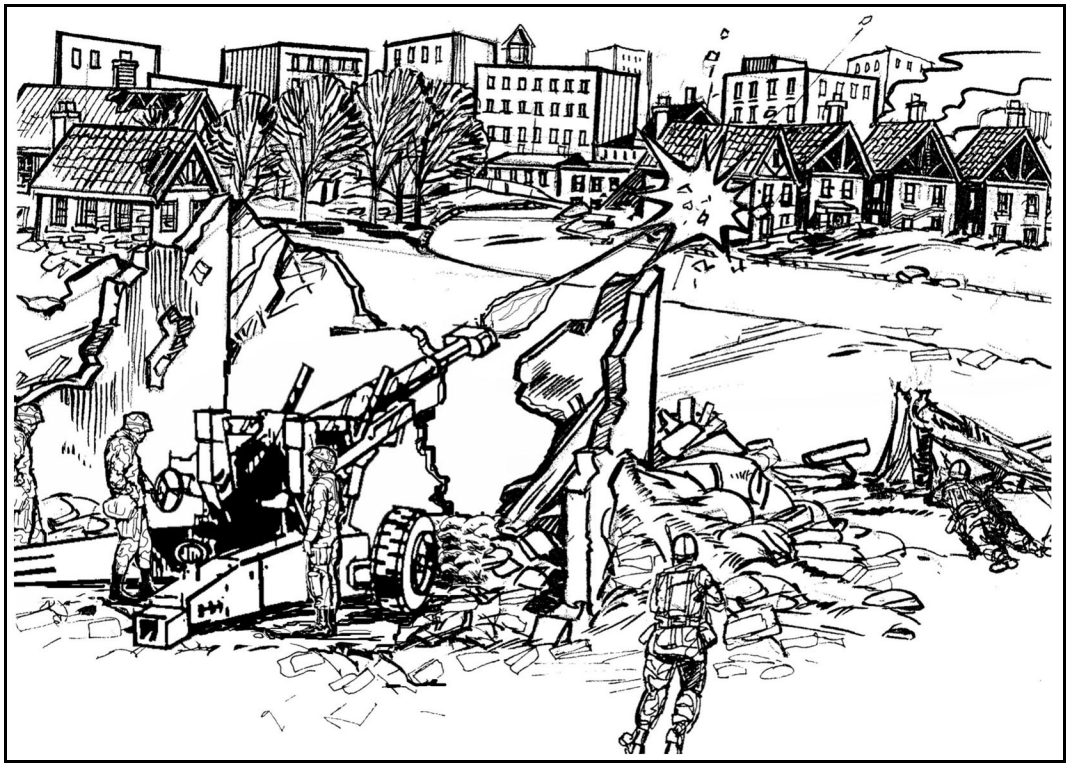

Figure 6-6. Artillery in direct fire role.

e. **Time.** Offensive operations in built-up areas have a slower pace and operational tempo. Consider the following issues when analyzing time available for an attack in urban terrain:

(1) Clearing buildings, blocks, or axes of advance in the dense environment of urban terrain requires more time than for operations in more open terrain.

(2) Troops tire more quickly because of stress and the additional physical exertion related to clearing urban terrain. Plan additional time to recover from fatigue.

(3) Allow additional time for thorough reconnaissance and rehearsals in order to prevent excessive casualties and fratricide.

6-5. BATTLE COMMAND

Units in built-up areas frequently fight separated and isolated from one another. Planning is centralized, but execution is decentralized. Therefore, it is critical that the commander clearly describe his visualization of the terrain and the enemy to his platoon and squad leaders. In all situations, leaders should position themselves well forward so that they can control the action and provide assistance to subordinate leaders. In urban terrain, this is even more critical due to obstacles, poor visibility, difficulty in communications, and the intensity of urban combat. SBCT infantry commanders must demand timely, accurate, and complete reporting and must plan for effective command and control to lessen the effects of the urban battlefield. The FBCB2 capability is not 100 percent; the leader on the ground reporting the situation as he sees it produces SU.

a. **Command.** Subordinate units require mission-type orders that are restrictive in nature. SBCT infantry commanders should use detailed control measures to facilitate decentralized execution. Increased difficulties in command, control, and communications from higher headquarters demand increased responsibility and initiative from subordinate leaders. Graphic control measures common to other tactical environments are also used in combat in built-up areas. These and other control measures ensure coordination throughout the chain of command.

b. **Control.** Thorough rehearsals and detailed briefbacks also enhance control. It is important that subordinate leaders clearly understand the commander's intent (two levels up) and desired mission end state in order to facilitate control. SBCT infantry company commanders should consider using subordinate leaders to control certain portions of the fight when the commander's attention needs to be focused elsewhere (for example, using the XO to control the support element while the commander controls the assault elements).

(1) ***Establish Communications.*** In built-up areas, radio communications are often less effective than field telephones and messengers. Communications equipment may not function properly because of the materials used in the construction of buildings and the environment. Wire laid at street level is easily damaged by rubble and vehicle traffic. Pyrotechnic signals are hard to see because of buildings and smoke. The high noise level of battles within and around buildings makes sound signals and voice alerts difficult to hear, and voice communication can also signal the unit's intention and location to the enemy. Line-of-sight (LOS) limitations affect both visual and radio communications. Therefore, the time needed to establish an effective communications system might be greater in an urban environment. Leaders should consider these effects when they allocate time to establish communications. Since the effectiveness of normally dependable communications may be uncertain in UO, units may fight without continuous communications or the use of the tactical internet. Unit SOPs become significantly more important in urban terrain.

(2) ***Graphic Control Measures.*** The use of graphic control measures to augment FBCB2 and understanding of the SBCT commander's intent two levels up by all leaders becomes even more important to successful mission accomplishment in an urban

environment. Leaders can use phase lines to report progress or to control the advance of attacking units and limits of advance (LOAs) to prevent fratricide.

(a) When attacking to seize a foothold, the SBCT infantry company normally assigns a building or a few small buildings as a platoon's first objective. When an objective extends to a street, only the near side of the street is included in the objective area. The company's final objective may be buildings at the far edge of the built-up area or key terrain on the far side. Key buildings or groups of buildings may also be assigned as intermediate objectives. To simplify assigning objectives and reporting, buildings along the route of attack should be identified by SOP. An example using numbers is shown in Figure 6-7.

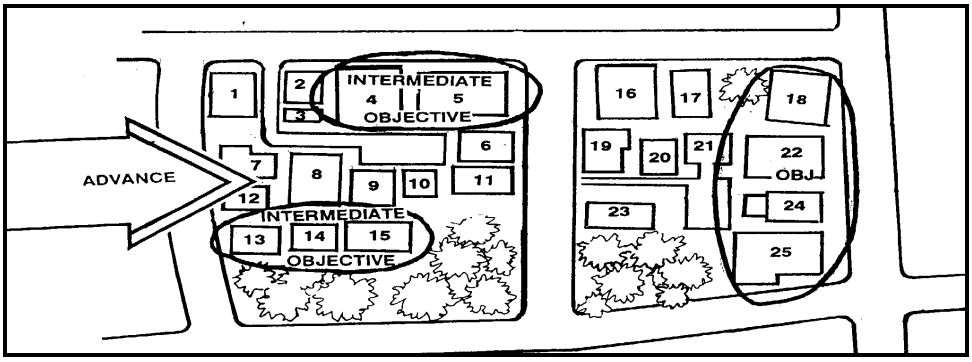

Figure 6-7. Example of a numbering system.

(b) When the company is involved in clearing a zone, bypassing buildings increases the risk of attack from the rear or flank. Thus, the clearing unit must enter, search, and clear each building in its zone of action or isolate it by fire or other means. A single building may be an objective for a rifle squad or, if the building is large, for a rifle platoon or even a company. When the SBCT infantry commander's concept is based on speed or when conducting a hasty attack, a company may be directed not to clear throughout its entire zone.

(c) Phase lines can be used to report progress or to control the advance of attacking units (Figure 6-8, page 6-18). Principal streets, rivers, and railroad lines are suitable phase lines, which should be on the near side of the street or open area. In systematic clearing, a company may have the mission to clear its zone of action up to a phase line. In that case, the company commander chooses his own objectives when assigning missions to his subordinate units.

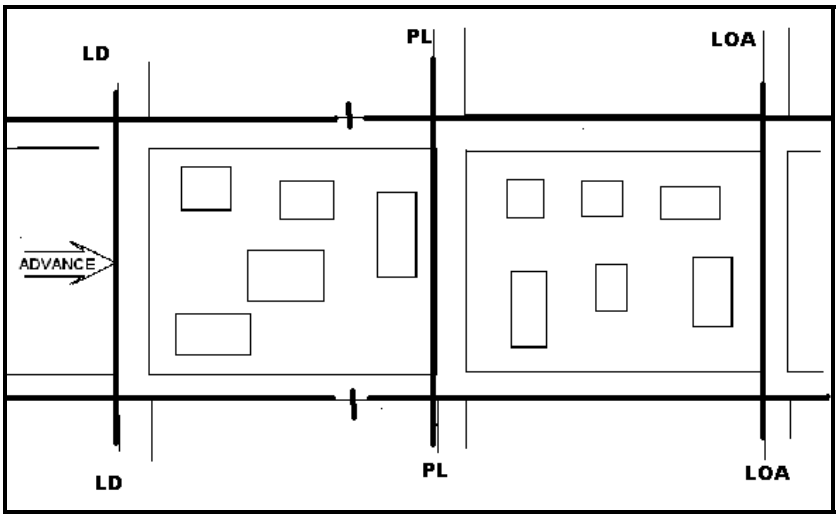

Figure 6-8. Zones, boundaries, and phase lines.

(d) Set company boundaries within blocks so that a street is included in a company zone. Place boundaries to ensure both sides of a street are in the zone of one unit.

(e) Plan checkpoints and contact points at street corners, buildings, railway crossings, bridges, or any other easily identifiable urban feature.

(f) Forward units may occupy an attack position for last-minute preparation and coordination. The attack position is often behind or inside the last covered and concealed position, such as a large building, before crossing the LD. The LD should be the near side of a street or rail line.

(g) A unit's assigned frontage for the attack of a built-up area depends on the size of buildings and the resistance anticipated. Based on city blocks averaging 175 meters in width, a company normally attacks on a one- to two-block front; a battalion attacks on a two- to four-block front.

(h) Conduct the attack when visibility is poor. Troops should exploit poor visibility to cross open areas, to gain access to rooftops, to infiltrate enemy areas, and to seize a foothold. If the attack must be made when visibility is good, units should use hydrogen chloride (HC) smoke or other obscurants to conceal movement.

6-6. TASK ORGANIZATION

The SBCT infantry company commander normally task-organizes his company into three elements: an assault force, a support force, and a reserve. The support force may be given a number of tasks to conduct on order or simultaneously. Specifically, the support force may support by fire, isolate the objective, or breach. The tactical situation dictates whether or not separate elements need to be task-organized in order to conduct these support missions. If available, engineers are usually task organized into the force performing a breach. The size and composition of the force are determined by METT-TC. If the company is part of an SBCT battalion operation, the company may have the mission to conduct one or more of the tasks mentioned above. If conducting an urban attack independently, the SBCT infantry company must perform both assault and support tasks.

a. **Assault Force.** The purpose of the assault force is to destroy the enemy, capture the enemy, or force the withdrawal of the enemy from any urban objective. The assault force of an SBCT infantry company may consist of two or more infantry platoons usually reinforced with engineers and MGS vehicles. Building and room clearing are normally conducted at platoon and squad levels. The assault force may also conduct a breach.

b. **Support Force.** The purpose of the support force is to provide any support that may be required by the assault force. The support force at the SBCT infantry company level normally consists of the company's organic assets (infantry platoons, MGS platoon, mortars, and antitank weapons), its attachments, and units that are under the operational control (OPCON) of the company commander. This assistance includes, but is not limited to--

- Suppressing or obscuring the enemy within the objective building(s) and adjacent structures.
- Isolating the objective building(s) to prevent enemy withdrawal, reinforcement, or counterattack.
- Breaching walls en route to and in the objective structure.
- Destroying or suppressing enemy positions with direct fire weapons.
- Securing cleared portions of the objective.
- Providing resupply of ammunition, explosives, and personnel.
- Evacuating casualties, EPWs, and civilians.

c. **Reserves.** SBCT infantry companies fighting in urban terrain should designate a reserve. The reserve should be the same size and composition as the assault force. (As a minimum, the reserve should have the same capabilities as the assault force to achieve the desired action at the desired point.) The company reserve should be mobile and prepared for commitment. Because of the available cover in built-up areas, the reserve can stay close to forward units. The reserve follows within the same block so that it can immediately influence the attack. Platoon(s) may be detached from the company to form a battalion reserve. A unit with a reserve mission may be called upon to perform one or more of the following tasks:

- Assume the mission of the assault force.
- Move behind the assault force to provide security in cleared buildings to allow the assault force to continue to move.
- Attack from another direction.
- Exploit an enemy weakness or friendly success.
- Clear bypassed enemy positions.
- Secure the rear or a flank.
- Maintain contact with adjacent units.
- Support or counterattack by fire.

d. **Breaching Element.** At the SBCT infantry company level, the assault or support force may conduct breaching. However, a separate breaching force may be created, or platoons may be given this mission and task-organized accordingly. The purpose of breaching is to provide the assault force with access to an urban objective, using explosive, ballistic, or mechanical methods. Explosive breaching includes using nonelectrical demolition systems; ballistic breaching includes using direct fire weapons; and mechanical breaching includes the use of crowbars, axes, saws, hooligan's tools, and sledgehammers. Attached engineers or members of the company who have had additional

training in explosive, ballistic, and mechanical breaching techniques may conduct the breach.

6-7. MOVEMENT

When moving in built-up areas (BUAs), an SBCT infantry company follows the same fundamentals and principles and uses the same movement techniques as in other areas. Enemy actions against the company might consist of ambushes on the street, enfilade fire down the streets, sniper fire, fire from rooftops and from within buildings, or artillery or mortar fire. The company can minimize the effects of enemy defensive fires during movement by--

- Using covered routes (moving through buildings).
- Moving only after defensive fires have been suppressed or obscured.
- Moving at night or during other periods of limited visibility.
- Selecting routes that will not mask friendly suppressive fires.
- Crossing open areas (streets and spaces between buildings) quickly under the concealment of smoke with suppression provided by support forces.
- Moving on rooftops that are not covered by enemy direct fires.
- Using the concealment provided by shaded areas.
- Using cover provided by attached armored vehicles.
- Creating deceptions.
- Laying suppressive fires on known or suspected enemy positions, as allowed by ROE.

a. **Movement Down Streets.** Should the situation allow or require movement down a street, platoons move in file along one or both sides of the street with overwatching fires from supporting weapons. Individual soldiers are dispersed, move quickly, and are detailed to observe and cover a certain area such as second-floor windows on the opposite side of the street. As in all urban situations, platoons must search for defenders in 360 degrees and in all three dimensions (front, flanks, rear, upper stories, basements, and rooftops).

b. **Speed of Movement.** The speed of movement depends on the type of operation, terrain, and degree of enemy resistance. As in any other terrain, the faster the speed of movement, the lesser the degree of security; the slower the speed, the more secure the movement. In lightly defended areas, the mission or the requirement for speed may dictate moving through the streets and alleys without clearing all buildings in order to reach and secure key terrain. More importantly, the company commander must establish and enforce the tempo of the operation.

c. **Danger Areas.** As in any other type of terrain, the company should avoid danger areas if possible. Unlike in other terrain, almost everything is a danger area in urban terrain. Types of urban danger areas include, but are not limited to--

- Open areas.
- Parking lots and garages.
- Intersections.
- Streets, alleys, and roadways.
- Traffic circles and cul-de-sacs.
- Bridges, overpasses, and underpasses.

- Subterranean areas.
- Rooftops.

6-8. DELIBERATE ATTACK

At the company level, a deliberate attack of an urban area usually involves the sequential execution of the tactical tasks below.

a. **Reconnoiter the Objective.** This method involves making a physical reconnaissance of the objective with company assets and those of higher headquarters, as the tactical situation permits. It also involves a map reconnaissance of the objective and all the terrain that affects the mission, to include the analysis of aerial imagery, photographs, or any other detailed information about the building or other urban terrain, for which the company is responsible. Additionally, any HUMINT collected by reconnaissance and surveillance units, such as the battalion reconnaissance platoon, snipers, and so forth, should be considered during the planning process.

b. **Move to the Objective.** This method may involve moving the company tactically through open and or urban terrain. Movement should be made as rapidly as possible without sacrificing security. Movement should be made along covered and concealed routes and can involve moving through buildings, down streets, subsurface areas, or a combination of all three. Urban movement must take into account the three-dimensional aspect of the urban area.

c. **Isolate the Objective.** Isolating the objective involves seizing terrain that dominates the area so that the enemy cannot supply, reinforce, or withdraw its defenders. It also includes selecting terrain that provides the ability to place suppressive fire on the objective. (This step may be taken at the same time as securing a foothold.) If isolating the objective is the first step, speed is necessary so that the defender has no time to react. Companies may be required to isolate an objective as part of a battalion operation or may be required to do so independently. Depending on the tactical situation, an infantry company may isolate an objective by infiltration and stealth.

d. **Secure a Foothold.** Securing a foothold involves seizing an intermediate objective that provides cover from enemy fire and a location for attacking troops to enter the urban area. The size of the foothold is METT-TC dependent and is usually a company intermediate objective. In some cases a large building may be assigned as a company intermediate objective (foothold). As the company attacks to gain a foothold, it should be supported by suppressive fire and smoke.

e. **Clear an Urban Area.** Before determining to what extent the urban area must be cleared, the factors of METT-TC must be considered. The ROE influence the tactics, techniques, and procedures (TTP) platoons and squads select as they move through the urban area and clear individual buildings and rooms.

(1) The commander may decide to clear only those parts necessary for the success of his mission if--

- An objective must be seized quickly.
- Enemy resistance is light or fragmented.
- The buildings in the area have large open areas between them. In this case, the commander would clear only those buildings along the approach to his objective or only those buildings necessary for security. (See Figure 6-9, page 6-22.)

(2) An infantry company may have a mission to systematically clear an area of all enemy. Through detailed analysis, the commander may anticipate that he will be opposed by a strong, organized resistance or will be in areas having strongly constructed buildings that are close together. Therefore, one or two platoons may attack on a narrow front against the enemy's weakest sector. They move slowly through the area, clearing systematically from room to room and building to building. The other platoon supports the clearing units and is prepared to assume their mission.

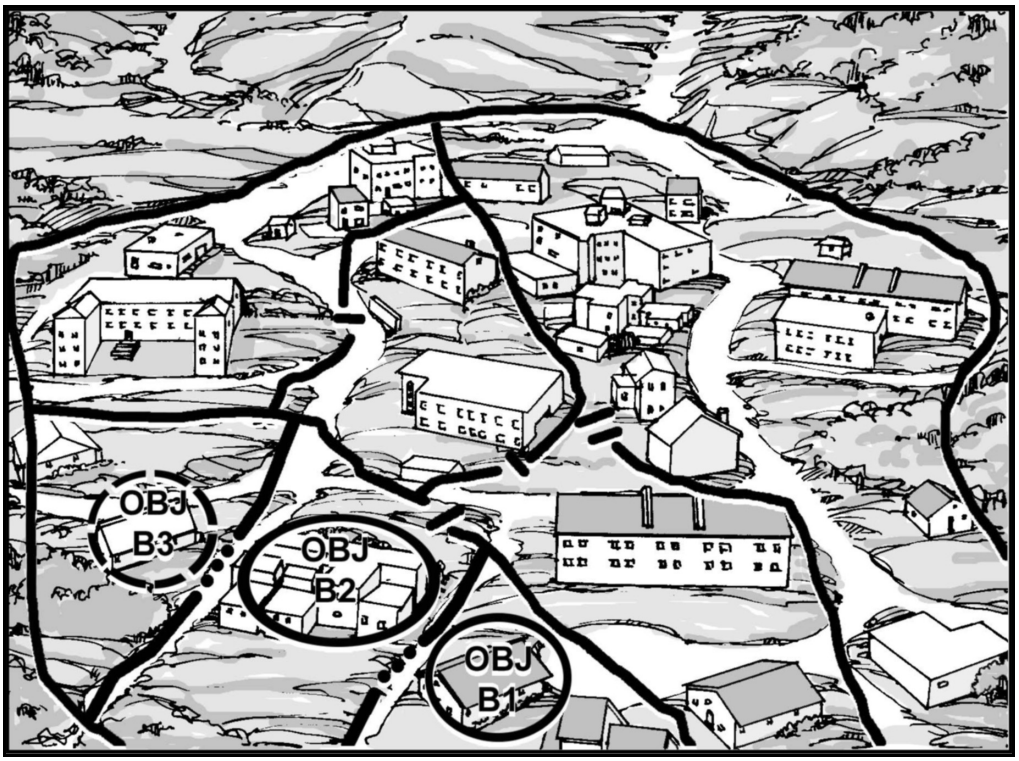

Figure 6-9. Clearing selected buildings within sector.

f. **Consolidate, Reorganize, and Prepare for Future Missions.** Consolidation occurs immediately after each action. Consolidation is security and allows the company to prepare for counterattack and to facilitate reorganization. It is extremely important in an urban environment that units consolidate and reorganize rapidly after each engagement. The assault force in a cleared building must be quick to consolidate in order to repel enemy counterattacks and to prevent the enemy from infiltrating back into the cleared building. After securing a floor, selected members of the assault force are assigned to cover potential enemy counterattack routes to the building. Priority must be given to securing the direction of attack first. Those soldiers alert the assault force and place a heavy volume of fire on enemy forces approaching the building. Reorganization occurs after consolidation. Reorganization actions prepare the unit to continue the mission; many actions occur at the same time.

(1) ***Consolidation Actions.*** Platoons assume hasty defensive positions after the objective has been seized or cleared. Based upon their specified and implied tasks, assaulting platoons should be prepared to assume an overwatch mission and support an assault on another building or another assault within the building. Commanders must

ensure that platoons guard enemy mouseholes between adjacent buildings, covered routes to the building, underground routes into the basement, and approaches over adjoining roofs.

(2) ***Reorganization Actions.*** After consolidation, the following actions are taken:

- Resupply and redistribute ammunition, equipment, and other necessary items.
- Mark the building to indicate to friendly forces that the building has been cleared.
- Move support or reserve elements into the objective, if tactically sound.
- Redistribute personnel and equipment on adjacent structures.
- Treat and evacuate wounded personnel.
- Treat and evacuate wounded EPW and process remainder of EPWs.
- Segregate and safeguard civilians.
- Re-establish the chain of command.
- Redistribute personnel on the objective to support the next phase or mission.

(3) ***Prepare for Future Missions.*** The company commander anticipates and prepares for future missions and prepares the company chain of command for transition to defensive and or stability and support missions.

6-9. ISOLATE AN URBAN OBJECTIVE

SBCT infantry companies must isolate urban objectives in order to prevent reinforcement of or counterattack against the objective and to kill or capture any withdrawing enemy forces. When planning the isolation, commanders must consider three-dimensional and in-depth isolation of the objective (front, flanks, rear, upper stories, basements, and rooftops). They should employ all available direct and indirect fire weapons, to include attack helicopters and CAS, consistent with the ROE. Isolating the objective is a key factor in facilitating the assault and preventing casualties. The company may perform this mission as the support element for a battalion operation, or it may assign the task to its own internal support element for a company attack. In certain situations, SBCT infantry companies may isolate an objective or an area for special operations forces. When possible, the company should isolate the objective using stealth and rapid movement in order to surprise the enemy. Depending on the tactical situation, infantry companies may use infiltration in order to isolate the objective. Likely tasks include, but are not limited to the following.

a. **Isolating the Objective (Battalion Attack).** An SBCT infantry company may isolate the objective as the support element for a battalion operation. When an infantry company has this mission, the objective is normally a larger structure, block, or group of buildings. The company commander task-organizes his platoons and assigns them support-by-fire positions based on the factors of METT-TC. In addition to isolating the objective, the company (support element) may have additional tasks to conduct on order or simultaneously. Examples of these additional tasks include providing the battalion reserve, assuming assault element missions, handling civilians and EPWs, and performing CASEVAC.

b. **Isolating the Objective (Company Attack).** When an SBCT infantry company conducts an attack, the task organization and tasks given to the company support element are determined by the factors of METT-TC. If the company conducts a company attack, the objective can be a building, block, a grouping of buildings, traffic circle, or village

(Figure 6-10). See Figure 6-11 for a technique of controlling direct fires during the assault.

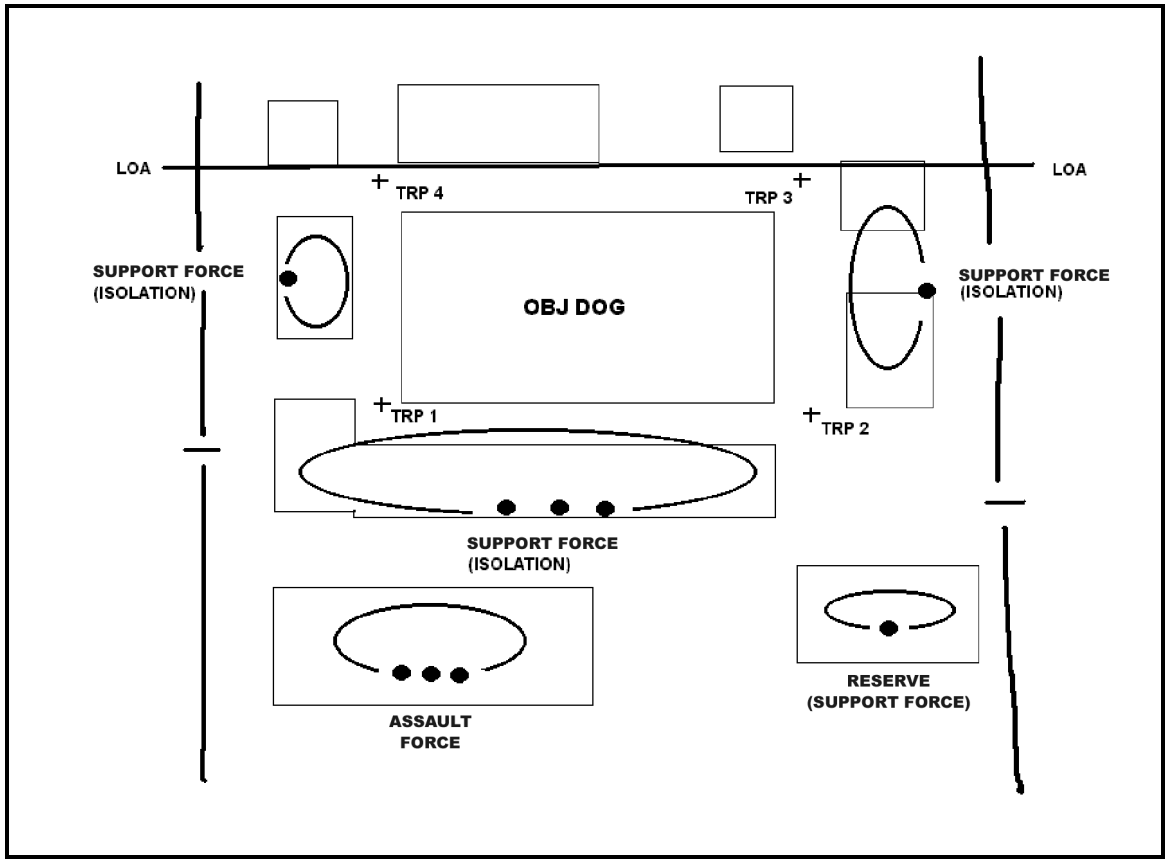
LOA
LOA
TRP 4
TRP 3
SUPPORT FORCE
(ISOLATION)
OBJ DOG
SUPPORT FORCE
(ISOLATION)
TRP 1
TRP 2
SUPPORT FORCE
(ISOLATION)
ASSAULT
FORCE
RESERVE
(SUPPORT FORCE)

Figure 6-10. Isolating an urban objective.

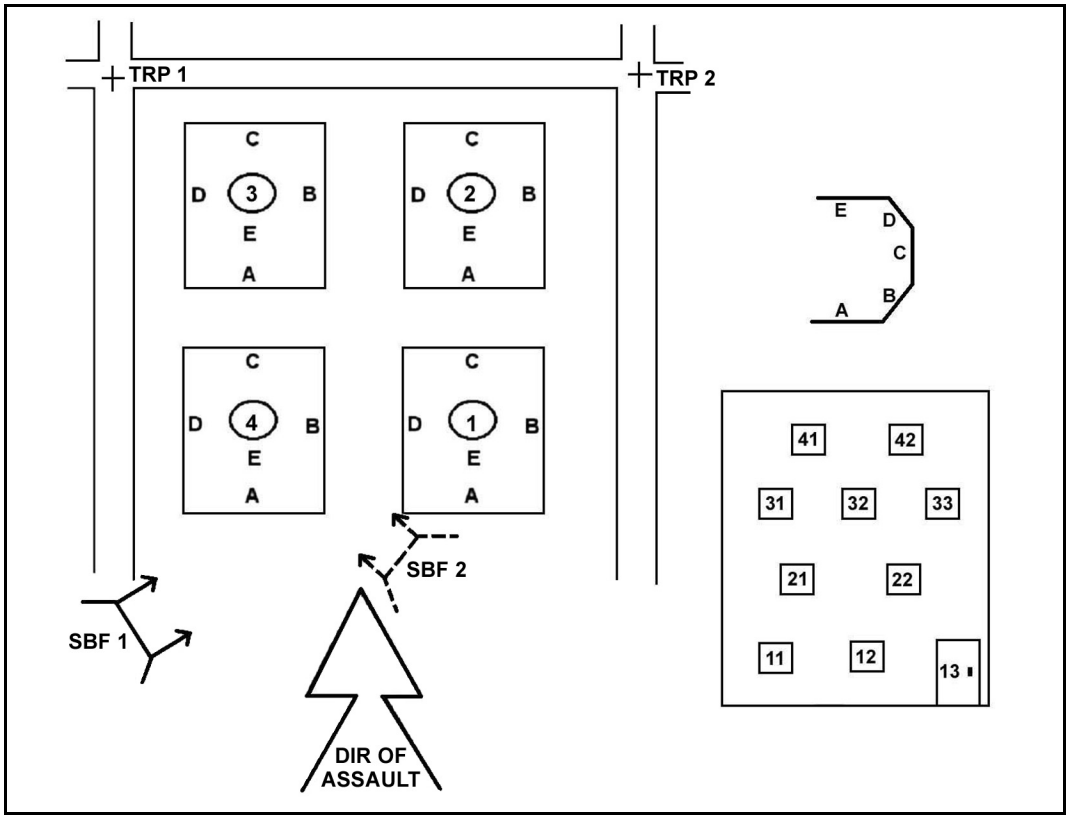

Figure 6-11. Direction of assault technique for direct fire planning and control.

6-10. ASSAULT A BUILDING

The SBCT infantry company conducts this mission independently or as part of the assault element of an SBCT battalion. (Independently is defined here as an SBCT infantry company having to provide its own support element, as opposed to conducting an operation without flank and rear support, such as a raid or ambush.) If the company is the assault force of a battalion, it most frequently conducts the assault against a large building defended by a strong enemy force (for example, a reinforced platoon). The SBCT company commander must clearly understand the specified and implied tasks required to accomplish the mission, as well as the SBCT and battalion commander's intent and the desired mission end state. This allows the company commander to task-organize and issue specific missions to his subordinate elements concerning which floors and rooms to clear, seize, or bypass. As an example, Figure 6-12, page 6-26, depicts an infantry battalion assigned the task of clearing the objectives in its sector (DOG and TAIL). Company B has the task of seizing OBJ TAIL. The company commander has decided to assign an intermediate objective (WING) to 1st Platoon. 3d Platoon is a supporting element with the task of isolating WING (1st and 2d squads to occupy the positions indicated) and providing one squad to act as the company reserve (3d squad). 2d Platoon (+) will pass through 1st Platoon, which will mark a passage lane and seize

TAIL. The MGS platoon (-) will be integrated into the supporting element for the assault of OBJ WING and OBJ TAIL.

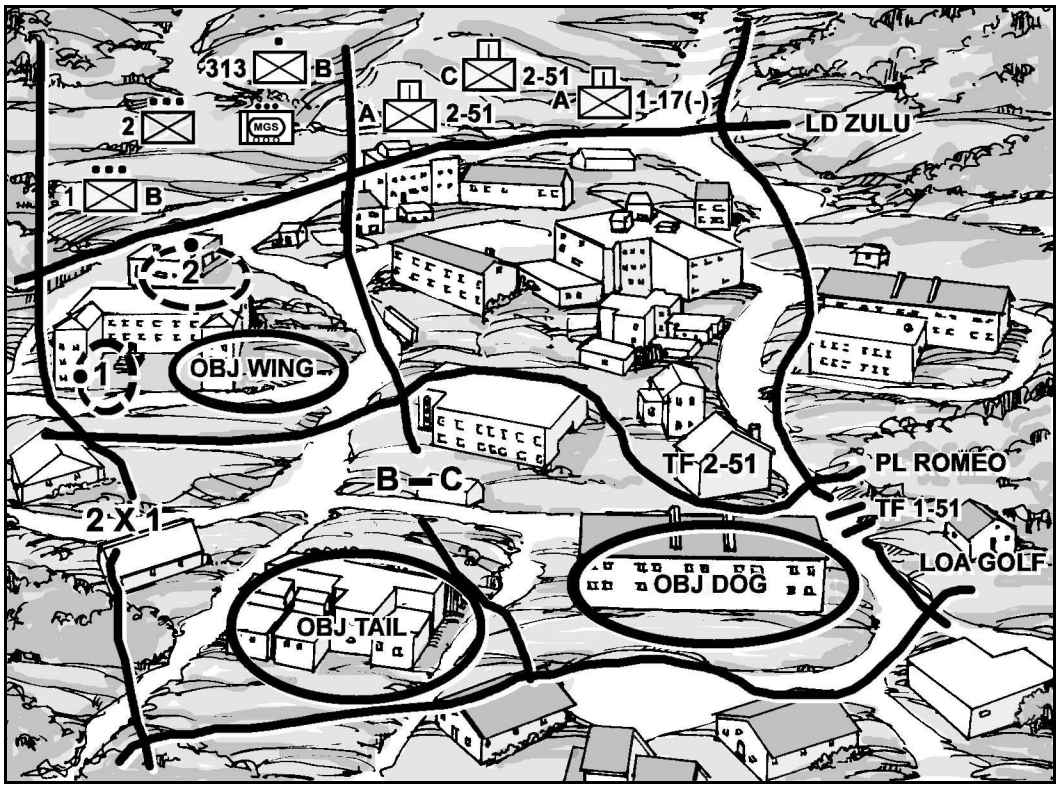

Figure 6-12. Assault of a building.

a. **Execution.** Platoons move floor-to-floor by bounds when clearing a multistory building. This permits troops to rest after a floor has been cleared. It is likely that platoons will need to leave security on cleared floors and in cleared rooms and to facilitate the passage of another platoon in order to continue the assault. The assault element must quickly and violently execute its assault and subsequent clearing operations. Once it gains the momentum, the assault force must maintain this momentum to prevent the enemy from organizing a more determined resistance on other floors or in other rooms. If platoons find rooms, hallways, or stairwells that are barricaded with furniture or where obstacles have been placed, they should first attempt to bypass the barricade or obstacle and maintain the momentum of the attack. If they cannot bypass the barricade or obstacle, they should place security on it, check it for booby traps, and then reduce it. Subordinate leaders should continue the momentum of the assault but not allow the operation to become disorganized.

b. **Ammunition and Equipment.** METT-TC factors and the ROE determine how the assault element is equipped and armed. Commanders must carefully manage the soldier's load during the assault. Ammunition, water, special assault weapons and equipment, and medical supplies are normally the only items carried in the assault. The assault force carries only a fighting load of equipment and as much ammunition as possible, especially grenades. (See Section II, Chapter 11, for a discussion of load management.) The SBCT battalion and SBCT infantry company trains maintain control of additional ammunition and equipment not immediately needed by the assault force. An

often-overlooked munition in an urban battle is the light antitank weapon. Soldiers can use these for a variety of purposes such as suppressing a manned position or supporting a breach into a structure. Resupply should be pushed to the assault element by the support element.

c. **Assault Locations.** The assault may begin from the top or bottom of the building.

(1) ***Top Entry.*** Entering at the top and fighting downward is the preferred method of clearing a building. This method is only feasible, however, when the company can gain access to an upper floor or rooftop by ladder or from the windows or roofs of adjoining, secured buildings, or by helicopter if enemy air defense weapons can be suppressed. The company can also gain access to the roof by entering at ground level and fighting up a stairwell or elevator shaft. They then clear the remainder of the building from the top to bottom. This will afford the soldiers a covered and concealed route to the upper floors of the building. Rooftops are danger areas when surrounding buildings are higher and forces can be exposed to fire from those buildings. Helicopters should land only on those buildings that have special heliports on the roofs or on parking garages, but soldiers can rappel or fast rope onto the roof or dismount as the helicopter hovers a few feet above the roof. Troops can then breach the roof or common walls. They may use ropes or other means to enter the lower floors through the holes created. The use of ladders to assault an upper level should be a last resort.

(2) ***Bottom Entry.*** Entry at the bottom is common and may be the only option available. When entering from the bottom, breaching a wall is the preferred method because doors and windows may be booby-trapped and covered by fire from inside the structure. If the assault element must enter through a door or window, it should enter from a rear or flank position. Prior to entering the building the commander must ensure the platoons have the capability to create entry points from covered and concealed positions. MGS or other breaching assets should be allocated to the platoons. These assets conduct the breaches and allow the platoons to enter the building to be seized directly from covered and concealed positions.

d. **Suppressive Fires During the Assault.** The support force provides suppressive fire while the assault force systematically clears the building. It also provides suppressive fire on adjacent buildings to prevent enemy reinforcements or withdrawal. Suppressive fire may consist of firing at known and suspected enemy locations or, depending on the ROE, may include only firing at identified targets or returning fire when fired upon. The support force destroys or captures any enemy personnel trying to exit the building. The support force must also deal with civilians displaced by the assault.

e. **Clearing Rooms.** SBCT infantry company commanders must ensure that clearing platoons carry enough room marking equipment and plainly mark cleared rooms from the friendly side IAW unit SOP (Figure 6-13, page 6-28). Markings must be visible to friendly units even if the operation occurs during limited visibility. The support force must understand which markings will be used and ensure that suppressive fires do not engage cleared rooms and floors. Maintaining an awareness as to where the assault teams are and which rooms and floors have been cleared is imperative and a key command and control function for the company commander.

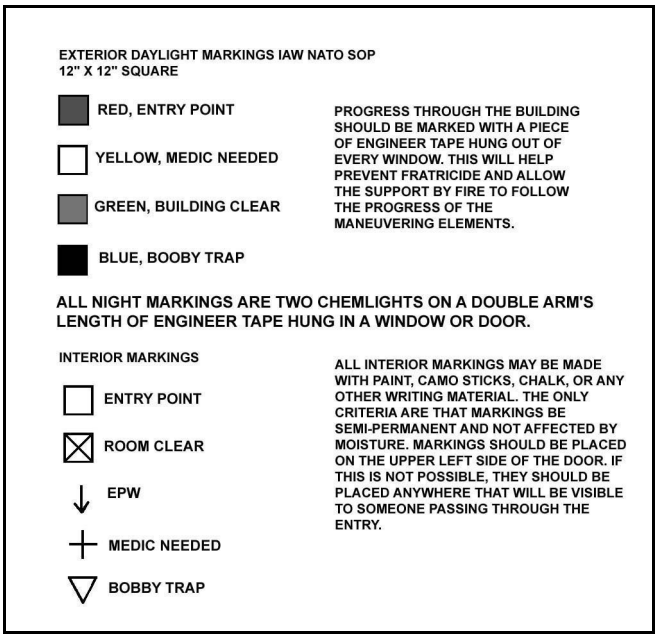

Figure 6-13. Sample marking SOP.

6-11. ATTACK A BLOCK OR GROUP OF BUILDINGS

An SBCT infantry company normally attacks a block or group of buildings as part of an SBCT battalion attack. To attack a block or group of buildings, an infantry company reinforces with MGS vehicles and possibly engineers, BFVs, or tanks, consistent with the ROE and the enemy situation.

a. **Execution.** Platoon attacks supported by both direct and indirect fires characterize the execution of this mission. Success depends on isolating enemy positions (which often become platoon objectives), suppressing enemy weapons, seizing a foothold in the block, and clearing the block's buildings room by room.

b. **Direct Fire Weapons.** ICVs, MGS vehicles, machine guns, and other direct fire support weapons fire on the objective from covered positions, consistent with the ROE. These weapons should not be fired for prolonged periods from one position. The gunners should use a series of positions and displace from one to another to gain better fields of fire and to avoid being targeted by the enemy. Direct fire support tasks can be assigned as follows:

- Machine guns fire along streets and into windows, doors, mouseholes, and other probable enemy positions. ROE may restrict firing only to known enemy locations.
- MGS vehicles fire at targets protected by walls and provide protection against enemy vehicles, as required.
- ICVs may use mounted weapons systems to suppress enemy positions.
- Riflemen engage targets of opportunity.

c. **Obscuration and Assault.** Before an assault, the SBCT infantry company commander should employ smoke to conceal the assaulting platoons. He secures their flanks with direct fire weapons and employment of the reserve, if necessary. Concealed by smoke and supported by direct fire weapons, an assaulting platoon attacks the first isolated building. The assault force utilizes the cover of suppressive fires to gain a

foothold. The company commander must closely coordinate the assault with its supporting fire so that the fire is shifted at the last possible moment. After seizing the block, the SBCT infantry company consolidates and reorganizes to repel a counterattack or to continue the attack.

6-12. CONSOLIDATION AND REORGANIZATION

Consolidation occurs immediately after each action. Consolidation provides security and allows a unit to reorganize and prepare for counterattack. In an urban environment, it is extremely important that units consolidate rapidly after each engagement. The assault force in a cleared building must be quick to consolidate in order to repel enemy counterattacks and to prevent the enemy from infiltrating back into the cleared building. Many actions occur simultaneously. After securing a floor, selected members of the assault force cover potential enemy counterattack routes to the building. Priority must be given to securing the direction of attack first. Those soldiers alert the assault force and place a heavy volume of fire on enemy forces approaching the building. Reorganization occurs after consolidation. Reorganization actions prepare the unit to continue the mission.

a. **Consolidation Actions.** Platoons assume hasty defensive positions after the objective has been seized or cleared. Based upon their specified and implied tasks, assaulting platoons should be prepared to assume an overwatch mission and support an assault on another building or another assault within the building. Commanders must ensure that platoons guard--

- Enemy mouseholes between adjacent buildings.
- Covered routes to the building.
- Underground routes into the basement.
- Approaches over adjoining roofs.

b. **Reorganization Actions.** After consolidation, reorganization actions include the following:

- Resupply and redistribute ammunition.
- Mark the building to indicate to friendly forces that it has been cleared.
- Move support or reserve elements into the objective (if tactically sound).
- Redistribute personnel and equipment on adjacent structures.
- Treat and evacuate wounded personnel.
- Treat and process EPWs.
- Segregate and safeguard civilians.
- Reestablish the chain of command.
- Redistribute personnel on the objective to support the next phase or mission.

NOTE: During evacuation of casualties, the commander must ensure that he does not allow the evacuation to interfere with his on-going operation. He must ensure adequate forces are maintained to prevent the enemy from successfully counterattacking and reoccupying the building or buildings the company seized and cleared.

Section III. DEFENSE

The two defense patterns (area and mobile) apply in UO. Of these two patterns, the mobile defense pattern is more focused on the enemy. The commander may decide to use it based on his estimate of the situation. The area defense pattern is more appropriate when most of the reasons for defending a built-up area are focused on retaining terrain. In a built-up area, the defender must take advantage of inherent cover and concealment afforded by urban terrain. He must also consider restrictions to the attacker's ability to maneuver and observe. By using the terrain and fighting from well-prepared and mutually supporting positions, a defending force can delay, block, fix, or inflict heavy losses on a much larger attacking force. The defense of a built-up area should be organized around key terrain features, buildings, and areas that preserve the integrity of the defense and provide the defender ease of movement. The defender must organize and plan his defense by considering obstacles, avenues of approach, key terrain, observation and fields of fire, cover and concealment, fire hazards, and communications restrictions.

6-13. METT-TC FACTORS

Procedures and principles for planning and organizing the defense of a built-up area are the same as for other defensive operations. In developing a defensive plan, the defender considers the factors of METT-TC, emphasizing their impact on fire support, preparation time, work priorities, and control measures. Planning for the defense of a built-up area must be detailed and centralized. As in the offense, execution is decentralized as the battle develops and enemy forces assault buildings and rooms. Therefore, it is imperative that the company commander and his subordinate leaders understand the mission end state and the commanders' intent two levels up.

a. **Mission.** The SBCT infantry commander must receive, analyze, and understand the mission before he begins planning. He may receive the mission as a FRAGO or formal OPORD, and he must analyze all specified and implied tasks. Depending on mission requirements, an infantry company must be prepared to defend independently or as part of a larger force (SBCT battalion). Mission planning is essentially the same for all defensive operations. A hasty defense may be conducted in any of the situations described below, immediately after offensive operations, or when a higher state of security is warranted during stability operations or support operations. The major difference lies in the amount of time for preparation and the ROE.

b. **Enemy.** The commander must also analyze the type of enemy force he may encounter. If the attacker is mostly dismounted infantry, the greatest danger is allowing him to gain a foothold. If the attacker is mostly armored or mounted motorized infantry, the greatest danger is that he will mass direct fire and destroy the defender's positions. Intelligence gathering for defensive operations is not limited to only studying the enemy. Commanders must emphasize obtaining and using all intelligence. The items of intelligence peculiar to combat in built-up areas include--

- Street, water, and sewer plans.
- Key installations and facilities.
- Key civilians.
- Civilian police and paramilitary forces.
- Sources of food.

- Communications facilities and plans.
- Power stations.

c. **Terrain.** Terrain in built-up areas is three-dimensional: ground level (streets and parks), above ground (buildings), and below ground (subways and sewers). Analysis of all manmade and natural terrain features is critical when planning to defend on built-up terrain. The type of built-up area in which he will operate affects the commander's defensive plan.

(1) ***Villages.*** Villages are often on choke points in valleys, dominating the only high-speed avenue of approach through the terrain. If the buildings in such a village are well constructed and provide good protection against both direct and indirect fires, a formidable defense can be mounted by placing a company in the town while controlling close and dominating terrain with other SBCT battalion elements.

(a) If the terrain allows easy bypass and there are no other villages on defendable terrain within a mutually supporting distance, it is unwise to defend the village. Doing so would allow friendly forces to be easily bypassed and isolated.

(b) Commanders may use villages on approaches to large towns or cities to add depth to the defense or to secure the flanks. These villages are often characterized by clusters of houses and buildings (stone, brick, or concrete). Company-size battle positions in these small villages can block approaches into the main defensive positions.

(2) ***Strip Areas.*** Strip areas consist of houses, stores, and factories and are built along roads or down valleys between towns and villages. They afford the defender the same advantages as villages. If visibility is good and enough effective fields of fire are available, a unit acting as a security force need occupy only a few strong positions spread out within the strip. This will deceive the enemy, when engaged at long ranges, into thinking the strip is an extensive defensive line. Strip areas often afford covered avenues of withdrawal to the flanks once the attacking force is deployed and before the security force becomes decisively engaged.

(3) ***Towns and Cities.*** When facing a predominantly armored enemy, a small force can gain an advantage in combat power when defending a small city or town that is a choke point by placing MGSs, ICVs, and Javelins on positions dominating critical approaches. To deny the enemy the ability to bypass the town or city, the defending force must control key terrain and coordinate with adjacent forces. Reserve forces should be placed where they can quickly reinforce critical areas. Obstacles and minefields assist in slowing and canalizing the attacker.

(a) Finding positions in towns and cities that provide both good fields of fire and cover is often difficult. The forward edges of a town usually offer the best fields of fire but can be easily targeted by enemy overwatch and supporting fire. These areas often contain residential buildings constructed of light material. Factories, civic buildings, and other heavy structures, which provide adequate cover and are more suitable for a defense, are more likely to be found deeper in the town and have limited fields of fire on likely avenues of approach.

(b) Since the forward edge of a town is the obvious position for the defender, it usually should be avoided. However, the defender can set up his position there if the terrain limits the enemy's ability for engagement or contains strongly constructed buildings that give defending units adequate protection.

(c) A force may initially be assigned battle positions on the forward edge of the town to provide early warning of the enemy's advance. The force engages the enemy at long range and deceives the enemy as to the true location of the defense. This force should withdraw in time to avoid decisive engagement. If there is limited observation from the forward edge, a force should be positioned on more favorable terrain forward or to the flanks of the town to gain better observation and to engage the enemy at long range.

(d) To prevent airmobile or airborne landings within the city or town, the commander must emplace obstacles on probable LZs and DZs, to include parks, stadiums, and large rooftops and heliports. Direct and indirect fires should also cover these.

(4) ***Large Built-Up Areas.*** In large built-up areas, tall buildings are normally close together. This may require a higher density of troops and smaller defensive sectors than in other urban terrain. The density of buildings, rubble, and street patterns may dictate the depth and frontage of the unit (Table 6-1).

UNIT	FRONTAGES	DEPTHS
SBCT infantry battalion	4 to 8 blocks	3 to 6 blocks
SBCT infantry company	2 to 4 blocks	2 to 3 blocks
SBCT infantry platoon	1 to 2 blocks	1 block
NOTE: An average city block has a frontage of about 175 meters. These minimum figures apply in areas of dense block-type construction, multistory buildings, and underground passages.		

Table 6-1. Approximate frontages and depths in large built-up areas.

(a) In a large built-up area, an SBCT infantry company has a sector, battle position(s), or a strongpoint to defend. Although mutual support between positions should be maintained, built-up terrain often allows for infiltration routes that the enemy may use to pass between positions. Therefore, the defender must identify the following:

- Positions that enable him to place effective direct fires on the infiltrating enemy.
- Covered and concealed routes for friendly elements to move between positions (subways and sewers).
- Structures that dominate large areas.
- Areas where antiarmor weapons have effective fields of fire, such as parks, boulevards, rivers, highways, and railroads.
- Firing positions for mortars.
- Command and control locations that offer cover, concealment, and ease of communications.
- Protected storage areas for supplies.

(b) Leaders choose buildings that add most to the general plan of defense for occupation. Mutual support between these positions is vital to prevent the attacker from maneuvering and outflanking the defensive position, making it untenable. Buildings chosen for occupation as defensive positions should have the following characteristics:

- Good protection.
- Strong floors to keep the structure from collapsing under the weight of debris.
- Thick walls.

- Constructed of nonflammable materials (avoid wood).
- Strategically located (corner buildings or prominent structures).
- Adjacent to streets, alleys, vacant lots, and park sites. (These buildings usually provide better fields of fire and are more easily tied in with other buildings.)
- Covered by friendly fire and offering good escape routes.

(5) ***Obstacles.*** A built-up area is itself an obstacle since it canalizes and impedes an attack. Likely avenues of approach should be blocked by obstacles and covered by fire (Figure 6-14). Barriers and obstacles should be emplaced in three belts, consistent with the ROE.

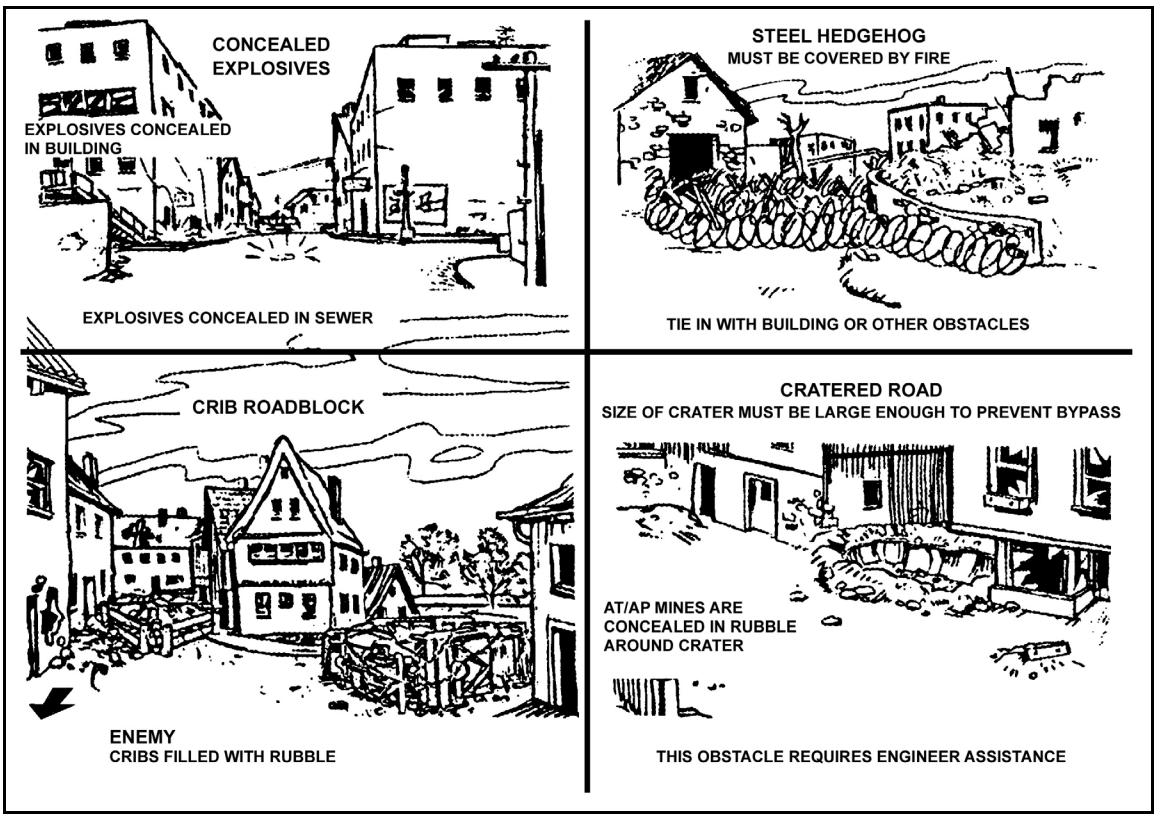

Figure 6-14. Example of urban obstacles.

(6) ***Avenues of Approach.*** The defender must consider not only the conventional avenues of approach into and out of the city, but also the avenues above and below ground level within built-up areas. The defender normally has the advantage. He knows the built-up area and can move rapidly from position to position through buildings and underground passages. Control of these above- and below-ground avenues of approach becomes more critical when the defense of key terrain must be oriented against terrorism and sabotage. All avenues of approach (three-dimensionally) must be denied. SBCT infantry company commanders must not overlook the use of field-expedient obstacles, such as cars and light poles, or the emplacement of command detonated antipersonnel mines and antitank mines. Commanders must clearly understand the ROE and what they are permitted to emplace. When necessary, obstacles can be emplaced without mines and covered by fire within the parameters of the ROE.

(7) ***Key Terrain.*** Key terrain is any place where seizure, retention, or control affords a marked advantage to either combatant. Examples of key terrain during UO are bridges over canals or rivers, building complexes, public utilities or services, and parks. The population of a built-up area may also be considered key terrain. The identification of key terrain allows the defender to select his defensive positions and assists in determining the enemy's objectives.

(8) ***Observation and Fields of Fire.*** The defender must position weapons to obtain maximum effect and mutual supporting fire. This allows for long-range engagements out to the maximum effective ranges. Observers should be well above street level to adjust fires on the enemy at maximum range. Fires and FPFs should be preplanned and, if possible and ROE permitting, preregistered on the most likely approaches to allow for their rapid shifting to threatened areas.

(9) ***Cover and Concealment.*** The defender should prepare positions using the protective cover of walls, floors, and ceilings. Soldiers should always improve positions using materials on hand. When the defender must move, he can reduce his exposure by--

- Using prepared breaches through buildings.
- Moving through reconnoitered and marked subterranean systems.
- Using trenches.
- Using the concealment offered by smoke and darkness to cross open areas.

d. **Troops Available**. Urban operations are manpower intensive.

(1) ***Employment of Platoons and Organic Assets.*** Once the SBCT infantry commander has decided where to defend, he should select platoon battle positions or sectors that block or restrict the enemy's ability to maneuver and control key areas. The frontage for a platoon is about one to two city blocks long. Platoons can occupy about three small structures or a larger two- to three-story building (Figure 6-15). Along with his primary and alternate positions, the platoon leader normally selects one supplementary position to reorient his defense to meet enemy threats from another direction. Companies may be tasked to detach a platoon to act as the SBCT infantry battalion reserve.

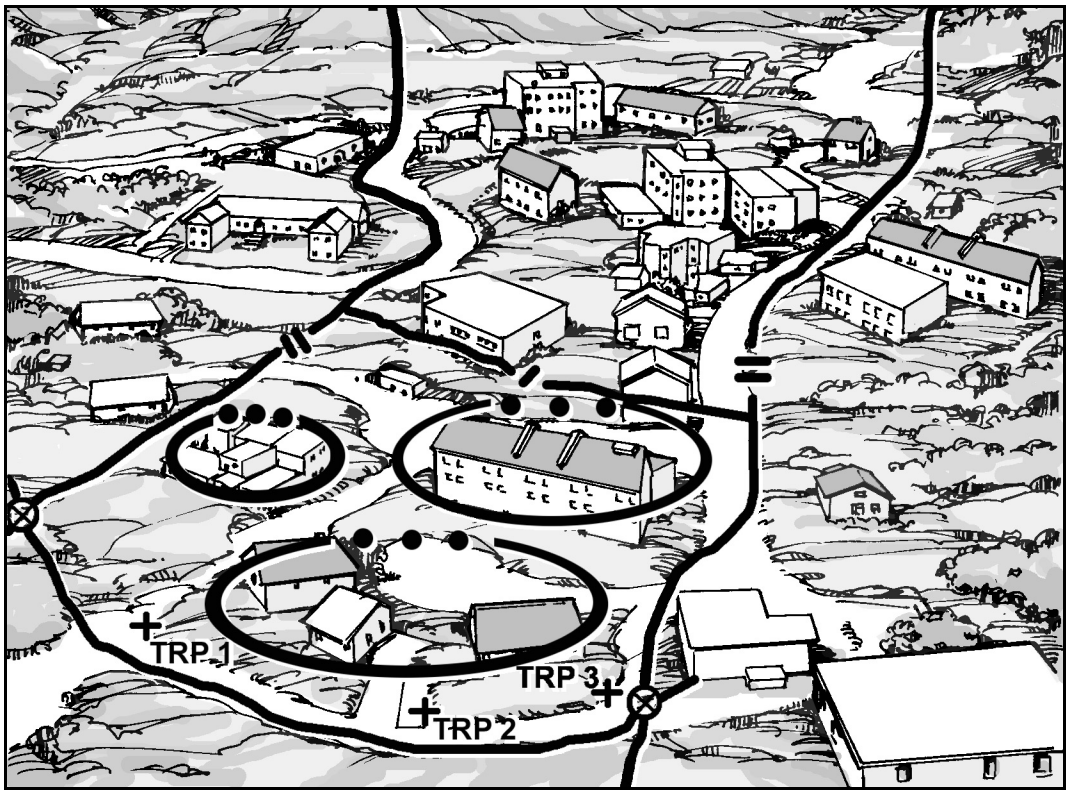

Figure 6-15. Platoon battle positions in a company sector.

(a) *Mortar Section*. Mortars at the SBCT infantry company level are employed to maximize the effect of their high-angle fires. They should be used to engage--

- Enemy overwatch positions.
- Enemy infantry before they seize a foothold.
- Targets on rooftops.
- Enemy reinforcements within range.

(b) *Javelins*. Based on the Javelin's capabilities and limitations, commanders give the platoons missions that can use antiarmor systems to support the defensive scheme of maneuver.

(2) ***Employment of MGS Vehicles and ICVs.*** The SBCT infantry commander should employ MGS vehicles and ICVs to take advantage of their long-range fires, armored protection, and mobility. Some built-up areas may restrict the mobility of MGS vehicles and ICVs and make them vulnerable to enemy infantry antiarmor weapons.

(a) When MGSs and ICVs are employed in the defense of a built-up area, infantry should be positioned to provide security against close antiarmor fires and to detect targets for the armored vehicles. MGSs and ICVs should be assigned engagement areas in support of the defensive scheme of maneuver. ICVs and Javelins should supplement MGS fires. MGSs and ICVs may be--

- Positioned on the edge of the city in mutually supporting positions.
- Positioned on key terrain on the flanks of towns and villages.
- Used to cover barricades and obstacles by fire.
- Positioned as part of the reserve.

(b) MGSs and ICVs are normally employed as a platoon. However, sections and individual vehicles may be employed with infantry platoons or squads. This provides MGSs and ICVs with the close security of the infantry. MGSs and ICVs provide the SBCT infantry company commander with a mobile force to respond quickly to enemy threats on different avenues of approach. They can also be effectively employed in counterattacks.

(3) ***Employment of Fire Support.*** Fire planning must be comprehensive due to the proximity of buildings to targets, minimum range restrictions, repositioning requirements, and ROE. Mortar and artillery fires are planned on top of and immediately around defensive positions for close support.

(a) *Artillery*. Artillery may be used as direct or indirect support. Artillery fire should be used--

- To suppress or obscure enemy overwatch elements.
- To disrupt or destroy an assault.
- To provide counterbattery fire.
- To support counterattacks.
- To provide direct fire when necessary.

(b) *Final Protective Fires*. FPFs are planned to stop dismounted assaults in front of the defensive positions. Fires within the city are planned along likely routes of advance to destroy the enemy as he attempts to deepen a penetration.

(c) *Priorities of Fire*. The SBCT infantry company commander should establish priorities of fire based on enemy avenues of approach and enemy systems that present the greatest danger to the defense. For example, during the attacker's initial advance, tanks, BMPs, and overwatching elements are the greatest threat to the defense. Javelins should concentrate on destroying armored vehicles. In certain situations, enemy armored personnel carriers (APCs) may present a larger threat than enemy tanks in a built-up area; the APCs carry infantry, which can gain footholds in buildings. Mortar and artillery fires should suppress enemy ATGMs and overwatch positions or elements. If enemy formations secure a foothold, priority shifts to the destruction of enemy forces within the penetration.

(d) *Control of Supporting Fires*. As the attack progresses in the city, enemy indirect fires increase to separate infantry from supporting MGSs and ICVs. During this phase, friendly artillery concentrates on counterfire missions and the destruction of reinforcements that are approaching the city. Mortars concentrate on infantry attacks.

(e) *Support of Counterattacks*. When initiated, counterattacks are given priority of supporting fires. When artillery fires the missions mentioned above, it must remain mobile and be prepared to displace to preplanned positions to avoid enemy counterbattery fire.

(f) *Indirect Fire Planning*. At company and platoon level, indirect fire plans include fires of organic, attached, and supporting weapons. The SBCT infantry company commander also plans his own mortar and artillery fires on and immediately around his battle positions for close support.

(g) *Air Defense Assets*. Air defense assets available to the commander, such as Stinger and Avenger, are normally employed to ensure all-round air defense. These assets are normally controlled at SBCT battalion level, but they may be placed under the SBCT infantry company commander’s control when METT-TC factors warrant that type of use.

The lack of good firing positions for long-range air defense missile systems in the built-up area may limit the number of deployed weapons. In the defense, weapons systems may have to be winched or airlifted into positions. Rooftops and parking garages are good firing positions because they normally offer a better line of sight. Stingers and Avengers may be assigned to protect specific positions or function in general support of the battalion.

(4) ***Employment of Engineers.*** Engineers are employed under SBCT battalion control or attached to SBCT infantry companies. SBCT infantry company commanders may receive an engineer squad to assist them in preparing the defense. Commanders must consider engineer tasks that enhance survivability, mobility, and countermobility. Tasks that engineers can accomplish in the defense of a built-up area include--

- Constructing obstacles and rubbling.
- Clearing fields of fire.
- Laying mines.
- Preparing mobility routes between positions.
- Preparing fighting positions.

(5) ***Employment of the Reserve.*** The commander's defensive plan must always consider the employment of a reserve. The reserve force should be prepared to counterattack to regain key positions, to block enemy penetrations, to protect the flanks, or to assist by fire in the disengagement and withdrawal of positions. For combat in a built-up area, a reserve force--

- Normally consists of infantry.
- Must be as mobile as possible.
- May be supported by an MGS.

e. **Time Available.** The commander must organize and establish priorities of work, depending upon the time available. Many tasks can be accomplished simultaneously, but priorities for preparation should be in accordance with the commander's order. A sample priority of work sequence follows:

(1) ***Establish Security.*** The unit should quickly establish all-round security by placing forces on likely avenues of approaches. METT-TC factors determine the level of security (for example, 50 percent or 30 percent). The reconnaissance and counterreconnaissance plan should be emphasized.

(2) ***Assign Areas of Responsibility.*** Boundaries define sectors of responsibility. They include areas where units may fire and maneuver without interference or coordination with other units. Responsibility for primary avenues of approach should never be split. In areas of semidetached construction, where observation and movement are less restricted, boundaries should be established along alleys or streets to include both sides of a street in a single sector. Where buildings present a solid front along streets, boundaries may have to extend to one side of the street. Battle positions should also be specifically assigned to platoons, as required by METT-TC. The SBCT infantry company commander should specify which building(s) comprise the platoon battle position or strongpoint. Positions should be clearly designated so that no doubt remains as to which platoon has responsibility for occupation or control.

(3) ***Clear Fields of Fire.*** In built-up areas, commanders may need to rubble certain buildings and structures to provide greater protection and fields of fire to the defender. If the ceiling of a lower-story room can support the weight of the rubble, collapsing the top

floor of a building before the battle starts may afford better protection against indirect fires. Rubbling an entire building can increase the fields of fire and create an obstacle to enemy movement. Defenders must be careful, however. Rubbling buildings too soon or rubbling too many may give away exact locations and destroy cover from direct fire. Planning must be extensive so that rubbled buildings will not interfere with planned routes of withdrawal or counterattack. Vehicles may also have to be moved to clear fields of fire.

(4) ***Select and Prepare Initial Fighting Positions.*** The SBCT infantry company commander should select positions in depth. The unit should prepare positions as soon as troops arrive and continue preparing as long as positions are occupied. Enemy infiltration or movement sometimes occurs between and behind friendly positions. Therefore, each position must be organized for all-round defense. The defender should also--

(a) Make minimum changes to the outside appearance of buildings where positions are located.

(b) Screen or block windows and other openings to keep the enemy from seeing in or tossing in hand grenades. Include all windows so that the enemy cannot tell which openings the defenders are behind.

(c) Remove combustible material to limit the danger of fire. Fires are dangerous to defenders and create smoke that could conceal attacking troops. For these reasons, defenders should remove all flammable materials and stockpile firefighting equipment (such as water and sand). The danger of fire also influences the type of ammunition used in the defense. Do not use tracers or incendiary rounds extensively if threat of fire exists.

(d) Turn off electricity and gas at the facility that serves the urban area. Both propane and natural gas are explosive. Natural gas is also poisonous, displaces oxygen, and is not filtered by a protective mask. Propane gas, although not poisonous, is heavier than air. If it leaks into an enclosed area, it displaces the oxygen and causes suffocation.

(e) Locate positions so as not to establish a pattern. The unit should avoid obvious firing locations like church steeples.

(f) Camouflage positions.

(g) Reinforce positions with all materials available, such as mattresses, furniture, and so forth. Use caution because mattresses and fabric furniture are flammable. Fill drawers and cabinets with earth or sand to provide cover. Consider placing vehicles, such as trucks or buses, over positions outside buildings. Drain flammable fluids from vehicles and remove other flammables such as seats. Fill gas tanks with water.

(h) Block stairwells and doorways with wire or other material to prevent enemy movement. Create holes between floors and rooms to allow covered and concealed movement within a building.

(i) Prepare range cards, fire plans, and sector sketches.

(j) Consider how to use basements. If grazing fire can be achieved from basement windows, emplace machine guns in basements. When not using basements, seal them to prevent enemy entry.

(k) Cache resupply of ammunition, water, and medical supplies.

(5) ***Establish Communications.*** When allocating time to establish communications, commanders should consider the effects of built-up areas. Line-of-sight limitations affect both visual and radio/digital communications. Wire laid at street level is easily damaged by rubble and vehicle traffic. The noise of built-up area combat is much louder than in

other areas, making sound signals difficult to hear. Therefore, the time needed to establish an effective communications system in urban terrain may be greater than in other terrain. SBCT infantry company commanders should consider the following techniques when planning for communications:

(a) Emplace line of sight radios and retransmission sites on the upper floors of buildings.

(b) Use existing telephone systems. However, telephones are not secure even though many telephone cables are underground.

(c) Use messengers at all levels since they are the most secure means of communications.

(d) If assets are available, lay wire through buildings for maximum protection.

(6) ***Emplace Obstacles and Mines.*** To save time and resources in preparing the defense, commanders must emphasize using all available materials (to include automobiles, railcars, and rubble) to create obstacles. Civilian construction equipment and materials must be located and inventoried. This equipment can be used with engineer assets or in place of damaged equipment. Coordination must be made with proper civilian officials before use, which is normally a brigade or battalion staff responsibility. Engineers can provide advice and resources as to the employment of obstacles and mines.

(a) The principles for employing mines and obstacles do not change in the defense of a built-up area, but techniques do change. For example, concrete and asphalt make burying and concealing mines in streets difficult. Consider placing mines in sandbags so they are not visible and using fake mines placed in sandbags in order to deceive the enemy. Mines and obstacles must be emplaced consistent with the ROE. Any antipersonnel mines must be command detonated.

(b) Obstacles must be tied to buildings and rubbled areas to increase effectiveness and to canalize the enemy. Family of scatterable mines (FASCAM) may be effective on the outskirts of an urban area or in parks, but in a city core, areas may be too restrictive.

(c) Riot control agents may be employed to control noncombatant access into defensive areas.

(7) ***Improve Fighting Positions.*** When time permits, all positions, to include supplementary and alternate positions, should be reinforced with sandbags and provided overhead cover. Attached engineers can help in this effort by providing advice and assisting with construction.

(8) ***Establish and Mark Routes between Positions.*** Reconnaissance by all defending elements assists in route selection for use by defenders moving between positions. Movement is crucial in fighting in built-up areas. Early selection and marking of routes adds to the defender's advantages.

f. **Civilian Considerations.** International law and moral imperatives require the SBCT infantry company commander to consider the effects of operations on the civilian population. The company commander must also consider cultural, economical, and political boundaries as they may have a direct impact on the range of tactical options available to him.

(1) Commanders may be precluded from countermobility operations directed at economically important roads, railways, and bridges. They must consider civilian

movement when emplacing minefields. Commanders implement restrictive fire control measures consistent with ROE.

(2) Units with large civilian populations in their AO often must conduct support operations while preparing a defense. When Army forces must damage areas that are important to civilians, they ensure that civilian leaders and populations understand why these actions are necessary.

g. **Fire Hazards.** The defender's detailed knowledge of the terrain permits him to avoid areas that are likely to be fire hazards. All urban areas are vulnerable to fire, especially those with many wooden buildings. The defender can deliberately set fires--

- To disrupt and disorganize the attackers.
- To canalize the attackers into more favorable engagement areas.
- To obscure the attacker's observation.

Likewise, the enemy may cause fires to confuse, disrupt, or constrain friendly forces and efforts. Company commanders should anticipate this possibility and ensure that fire-fighting equipment is on hand when conducting this type of operations.

6-14. COMMAND AND CONTROL

In all defensive situations, the SBCT infantry company commander should position himself well forward so that he can control the action. Regardless of the utility of FBCB2, the leader must see and feel the battlefield. In urban terrain, this is even more critical due to obstacles, poor visibility, difficulty in communication, and intense fighting.

a. **Graphic Control Measures.** The use of graphic control measures and understanding of the commander’s intent two levels up by all leaders become even more important to mission accomplishment in an urban environment. Phase lines can be used to report the enemy’s location or to control the advance of counterattacking units. Principal streets, rivers, and railroad lines are suitable phase lines. They should be clearly and uniformly marked on the near or far side of the street or open area. Checkpoints aid units in reporting locations and controlling movement. Contact points designate specific points where units make physical contact. Target reference points can facilitate fire control. These and other control measures ensure coordination throughout the chain of command.

b. **Command Posts.** Command posts should be located underground, if possible. Their vulnerability requires all-round security. Since each CP may have to secure itself, it should be near the reserve unit for added security. When collocated with another unit, however, CPs may not need to provide their own security. A simplified organization for command posts is required for ease of movement. Since rubble often hinders movement of tracked and wheeled vehicles, the company CP must be prepared to backpack communications and other needed equipment for operations. Alternate CP locations and routes to them must also be identified.

c. **Actions on Contact.** When enemy forces enter and maneuver to seize initial objectives, the defender should employ all available fires to destroy and suppress the direct fire weapons that support the ground attack. Tanks and enemy APCs should be engaged as soon as they come within the effective range of antiarmor weapons. As the enemy attack develops, the actions of small-unit leaders assume increased importance. Squad and platoon leaders are often responsible for fighting independent battles. Thus, it is important that all leaders understand their commander's concept of the defense (two

levels up). Where the enemy's efforts are likely to result in his gaining a foothold, violent counterattacks must deny him access into the main battle area.

d. **Rear Area.** SBCT infantry companies do not normally deploy maneuver elements in the rear area; however, squads and platoons may be detached in order to protect CSS elements. In certain cases, the company trains may collocate with the battalion combat trains.

e. **Counterattacks.** Small infantry-heavy reserves supported by ICVs and MGSs, if available, should be prepared to counterattack to regain key positions, to block enemy penetrations, to provide flank protection, and to assist by fire the disengagement and withdrawal of endangered positions. It is especially important for enemy footholds to be repelled violently. When the reserves are committed to counterattack to reinforce a unit, they may be attached to the unit in whose sector the counterattack is taking place. Otherwise, the counterattack becomes the main effort. This makes coordination easier, especially if the counterattack goes through the unit's positions.

f. **Defense During Limited Visibility.** SBCT infantry company commanders can expect the attacker to use limited visibility conditions to conduct necessary operations to sustain or gain daylight momentum.

(1) Commanders should employ the following measures to defend against attacks during limited visibility:

(a) Shift defensive positions and crew-served weapons from an alternate position or a hasty security position just before dark to deceive the enemy as to the exact location of the primary position.

(b) During limited visibility, consider the need to occupy, block, or patrol unoccupied areas between units, which can be covered by observed fire during daylight. Install early warning devices.

(c) Emplace radar, remote sensors, and night observation devices to cover streets and open areas.

(d) Position nuisance mines, noise-making devices, tanglefoot tactical wire, and OPs on all avenues of approach for early warning and to detect infiltration.

(e) Plan for artificial illumination, to include the use of street lamps, stadium lights, pyrotechnics, and so forth.

(f) Use indirect fire weapons, grenade launchers, and hand grenades when defenses are probed to avoid disclosure of defensive positions.

(2) Plan a signal to initiate FPFs when the enemy begins his assault. Crew-served weapons, armored vehicle mounted weapons (if available), and individual riflemen fire within their assigned sectors. Grenades and command-detonated mines should supplement other fires as the enemy approaches the positions.

(3) Move to daylight positions before BMNT. To facilitate movement, buildings should be marked from the friendly side IAW unit SOP.

g. **Communications Restrictions.** Radio/digital communications are initially the primary means of communication for controlling the defense of a built-up area and for enforcing security. Structures and a high concentration of electrical power lines may degrade radio/digital communication in built-up areas. Wire should be emplaced and used for communications as time permits. However, wire can be compromised if interdicted by the enemy. Messengers can be used as another means of communication. Visual signals may also be used but are less effective because of the screening effects of buildings and

walls. Signals must be planned, widely disseminated, and understood by all assigned and attached units. Increased battle noise makes the effective use of sound signals difficult.

6-15. HASTY DEFENSE

A very likely defensive mission for the SBCT infantry company in urban terrain is to conduct a hasty defense, which is characterized by reduced preparation time. All the troop-leading procedures are the same. The priorities of work are basically the same, but many take place concurrently. Units are deployed, weapons emplaced, and positions prepared in accordance with the amount of time the company commander has available.

a. **Occupation and Preparation of Positions.** Preparations for the hasty defense vary with the time available. The preparations described below generally take two to four hours. In a hasty defense, the primary effort is to camouflage and conceal the presence of the hasty fighting positions and provide as much protection as possible for the soldiers manning them. The company constructs positions using appliances, furniture, and other convenient items and materials. It locates them back from the windows in the shadows of the room. The company places less emphasis on fortifying positions and making major alterations to the environment, delaying such activities until after it has established security.

(1) ***Position Crew-Served and Special Weapons.*** Generally, the company positions crew-served and special weapons inside buildings unless an outside position is preferable and can be protected and camouflaged.

(2) ***Emplace Barriers and Obstacles.*** The company establishes two belts of barriers and obstacles that are not as extensive as in a defense that permits more time. The company covers all obstacles with observation and fires.

(3) ***Prepare Positions.*** Consider the following work sequence:

(a) Gather available materials, such as tables, dressers, and appliances, to construct positions.

(b) Construct stable firing platforms for the weapons.

(c) Use the material gathered to build frontal and side protection. Fill cabinets, dressers, end tables, and other furnishings with materials to stop small arms fire.

(d) Do not disturb firing windows. Curtains and other aspects of the original setting are components of camouflage.

(e) Construct alternate firing positions similar to the primary positions.

(f) Emplace rear and overhead cover on the primary positions (after constructing alternate positions).

(g) Remove fire hazards. Pre-position firefighting equipment.

(h) Construct dummy positions in rooms above, below, and next to primary and alternate positions in order to draw enemy suppressive fire away from primary positions.

(i) Walk the positions from the enemy side.

(4) ***Rehearsals.*** Conduct rehearsals with leaders and soldiers concerning the orientation of the defense, unit positions, location of crew-served weapons, counterattack plans, withdrawal plan, and so forth.

(5) ***Movement Enhancement.*** There is little time to improve movement within the defense. Units should plan to use tunnels, underground routes, and routes through buildings. The movement enhancement priority is to remove obstructions to alternate positions and the counterattack route.

(6) ***Communications.*** Check communications. Communications are primarily radio and digital. Plan and improve routes for messengers. If time is available, emplace wire as an improvement to the defense.

b. **Improving the Defense.** As time permits, consider the following areas and prioritize them in accordance with the factors of METT-TC:

- Rest plan.
- Barrier and obstacle improvement.
- Improvement of primary and alternate positions.
- Preparation of supplementary positions.
- Additional movement enhancement efforts.
- Initiation of patrols.
- Improvement of camouflage.
- Continued rehearsals for counterattack and withdrawal.
- ICV and MGS integration.

6-16. COMPANY DEFENSE OF A VILLAGE

A village is characterized by a built-up area surrounded by other types of terrain. Normally, an SBCT infantry company defends a village as part of an SBCT battalion defense, establishing battle positions and strongpoints with other SBCT infantry companies defending from key or decisive terrain. Once the SBCT infantry company commander has completed his reconnaissance of the village, he reconnoiters the surrounding terrain and, with the information assembled, he develops his plan for the defense. One of his first decisions is whether to defend with his infantry on the leading edge of the village or farther back within the confines of the village. Normally, defending on the leading edge, where the defending company can take advantage of longer-range observation and fields of fire, is more effective against an armor-heavy force. Defending in depth within the village to deny the enemy a foothold is more effective against a heavy force that is primarily infantry. This decision is based on the factors of METT-TC. The company may need to coordinate with adjacent units to plan for the defense or control of the open terrain that typically surrounds a village.

a. **Influencing Factors.** Several factors influence the commander's decision. First, he must know the type of enemy against which his company will defend. If the threat is mainly infantry, the greatest danger is allowing them to gain a foothold in the town. If the threat is armored or motorized infantry, the greatest danger is that massive direct fire will destroy the SBCT infantry company's defensive positions. The SBCT infantry company commander must also consider the terrain forward and to the flanks of the village from which the enemy can direct fires against his positions.

b. **Platoon Battle Positions.** Platoons are given a small group of buildings in which to prepare their defense, permitting the platoon leader to establish mutually supporting squad-size positions with ICVs. This increases the area that the platoon can control and hampers the enemy's ability to isolate or bypass a platoon. A platoon may be responsible for the road through the village. The rest of the SBCT infantry company is then positioned to provide all-round security and defense in depth.

c. **Company Mortars and Javelins.** The position of the SBCT infantry company mortars must protect the mortars from direct fire and allow for overhead clearance.

Javelin positions must allow them to engage targets at maximum ranges with alternate firing points.

d. **ICVs.** Position ICVs in defilade positions behind rubble and walls or inside buildings for movement into and out of the area. ICVs can also conduct resupply, CASEVAC, and rapid repositioning during the battle, or they can provide a mobile reserve for the company.

e. **MGS.** The SBCT infantry company commander can place the MGS platoon along the leading edge of the defensive position where rapid fire will complement the Javelins. The MGS platoon leader should select exact firing positions and recommend engagement areas. If faced by enemy infantry, the MGS platoon moves to alternate positions with the protection of the infantry. These alternate positions allow the MGS platoon to engage to the front as well as the flanks with as little movement as possible. Positions can be selected within buildings, and mouseholes can be constructed. After they are withdrawn from the leading edge of the town, the MGS platoon can also provide a mobile reserve for the company.

f. **Company Trains.** The SBCT infantry company commander locates a forward area where he can position his company trains. He chooses a location near the main avenue of approach to ease resupply, recovery, and maintenance operations.

g. **Rubbling.** If he has the authority and the ROE permit, the company commander also decides which buildings to rubble. To defeat the enemy, he must have good fields of fire, but rubbling the buildings too soon or rubbling too many may disclose his exact locations and destroy cover from direct fire.

h. **BFVs.** Based on METT-TC considerations and when available, BFVs may be placed along the forward edge of the urban area to engage enemy armored vehicles. Friendly armored vehicles also can be placed in positions to the rear of the buildings and interior courtyards where their weapon systems can provide added rear and flank security. Combat vehicles are assigned primary, alternate, and supplementary positions as well as primary and secondary sectors of fire. They should be positioned in defilade behind rubble and walls or inside buildings for movement into and out of the area. Armored vehicles also can be used for resupply, CASEVAC, and rapid repositioning during the battle. BFVs also can provide a mobile reserve for the company. If a mechanized infantry platoon is attached, it is controlled through its chain of command. If a mechanized infantry section is attached, it can be controlled through the senior squad leader.

i. **Tanks.** If a tank platoon is available, the company commander could place the tanks along the leading edge of the urban area where rapid fire would complement the antitank weapons. The tank platoon leader should select exact firing positions and recommend engagement areas. If faced by enemy infantry, the tanks move to alternate positions with the protection of friendly infantry. These alternate positions allow the tanks to engage to the front as well as the flanks with as little movement as possible. Positions can be selected within buildings and mouseholes can be constructed. After they are withdrawn from the leading edge of the village, the tanks could provide a mobile reserve for the company.

j. **FPFs.** The company plans FPFs to address the biggest threat to his company--the enemy's infantry. When firing an FPF inside a built-up area is necessary, mortars are

more effective than artillery. Mortars have a higher angle of fall, which gives them a greater chance of impacting on the street.

k. **Barriers and Obstacles.** The company can easily construct obstacles in a built-up area, but the obstacles must stop enemy vehicles without interfering with the company's own movement in the village. Therefore, the company detonates cratering charges at key street locations on order and lays mines on the outskirts of the town and along routes the company will not use. It normally emplaces barriers and obstacles in three belts.

l. **Engineers.** The supporting engineers use C4 and other explosives to make firing ports, mouseholes, and demolition obstacles. Based upon his priority of work, the SBCT infantry company commander tells the engineer squad leader to assist each of the infantry platoons preparing the village for defense and to execute the company obstacle plan. The engineer squad leader's mission is to tell the infantrymen exactly where to place the demolitions and how much is needed for the desired effect. He assists in preparation of charges. He also assists in the emplacement and recording of the minefields and the preparation of fighting positions.

m. **Service Support.** Ammunition expenditure is usually high when fighting in a built-up area. To avoid moving around the village with ammunition resupply during the battle, the SBCT infantry company commander directs that ammunition be stockpiled in each occupied platoon and squad position. He also orders the platoons to stockpile firefighting equipment, drinking water, food, and first-aid supplies at each squad position. Other factors the company commander must consider are--

- Resupply.
- Medical evacuation.
- Firefighting.
- Security.

n. **Communications.** To ensure adequate and continuous communications, the company plans and checks redundant verbal and nonverbal communications. It installs a wire net and develops a plan for pyrotechnic signals. It lays backup wire in case vehicles, fires, or the enemy cuts primary lines. The commander also plans for the use of messengers throughout the village.

6-17. DEFENSE OF A BLOCK OR GROUP OF BUILDINGS

An SBCT infantry company normally conducts a defense of a city block or group of buildings as part of an SBCT battalion conducting a sector defense in a built-up area. Company commanders may assign their platoons strongpoints, battle positions, sectors, or any combination of these. An infantry company operating in urban terrain may have to defend a city block or group of buildings in a core periphery or residential area. The company conducts this operation in accordance with the SBCT battalion’s defensive scheme of maneuver. The operation should be coordinated with the action of security forces that are charged with delaying to the front of the company's position. The defense should take advantage of the protection of buildings that dominate the avenues of approach into the MBA. This mission differs from defense of a village in that it is more likely to be conducted completely on urban terrain, without the surrounding open terrain that characterizes the defense of a village. An SBCT infantry company is particularly well suited for this type of mission since the fighting requires the enemy to move infantry into the built-up area to seize and control key terrain. In addition, an SBCT infantry

company normally conducts a delay in a built-up area as part of an SBCT battalion conducting a delay in sector. Companies delay conducting ambushes and occupying battle positions in sector, taking maximum advantage of the inherent cover and concealment of the urban terrain and routes within the built-up area.

a. **Task and Purpose.** A well-organized company defense in a built-up area--
- Stops the attack of the enemy on streets and city blocks by using obstacles and fire.
- Destroys the enemy by ambush and direct fire from prepared positions within defensible buildings.
- Ejects the enemy from footholds or remains in place for a counterattack.

b. **Reconnaissance and Security.** The execution of the mission will be more effective if the SBCT infantry company reconnoiters the terrain and prepares obstacles and fire lanes. Patrols should supplement the OPs, mainly during periods of limited visibility. The company should use wire communications. Platoons should have the mission to provide one OP in order to provide spot reports concerning the size, location, direction and rate of movement, and type of enemy assaulting the company sector or battle position.

c. **Task Organization.** METT-TC factors determine how the company commander task-organizes the company to accomplish the mission.

d. **Execution.** The defensive forces should ambush on the avenues of approach, cover the obstacles by fire, and prepare a strong defense inside the buildings. Counterattack forces should be near the front of the company sector in covered and concealed positions with an on-order mission to counterattack. Counterattack forces should have specific instructions as to what their actions will be after the enemy assault has been repelled, for example, to stay in sector or to revert back to reserve status. The company should conduct rehearsals both day and night.

6-18. DEFENSE OF KEY TERRAIN

An SBCT infantry company defends key terrain independently or as part of an SBCT battalion. It may form a perimeter defense around key terrain, such as a public utility (gas, electric, and water plants), communications center (radio and television), government center, command and control facility, and so forth. The infantry company may occupy and defend buildings and other dominant terrain or may establish and operate checkpoints and roadblocks in conjunction with this defense. An SBCT infantry company may defend a traffic circle or similar terrain to prevent the enemy from seizing it. This is characterized by the occupation and defense of the buildings around the traffic circle that control the avenues of approach into and out of the objective area. This defense may be part of conventional operations or may be an adjunct to a mission of stability operations or support operations. In many cases, an unclear enemy situation and extremely restrictive ROE characterize this mission. The facilities previously described are usually sited for their centrality of location and convenience, not for the defensibility of the terrain. Thus, the SBCT infantry company commander often finds his company must defend a piece of terrain that he would rather not have to occupy. The factors of METT-TC determine how to defend the objective.

a. **Task Organization.** The factors of METT-TC determine the task organization of the SBCT infantry company. Figure 6-16 depicts an SBCT infantry company with three rifle platoons and an organic MGS platoon defending an objective (a water purification plant). Upon request, the company commander will receive additional assets based on mission requirements and availability. In the situation depicted in Figure 6-16, the organic weapons of the infantry company are sufficient to accomplish the mission.

b. **Tasks.** The company commander must make a careful mission analysis in order to determine the specified and implied tasks associated with a mission of this type. In the situation shown in Figure 6-16, the SBCT infantry company commander may have determined that in order to defend the objective properly, he needs to deploy platoons on the defensible terrain available. Therefore, he defends urban terrain (left), high ground (top), and low vegetated terrain (right, bottom) all at once. Additionally, some of the tasks listed below may be necessary:

- Provide inner and outer security patrols.
- Establish OPs.
- Establish checkpoints and roadblocks.
- Conduct civilian control and evacuation.
- Conduct coordination with local authorities.
- Prevent collateral damage.
- Supervise specific functions associated with operation of the facility, such as water purification tests, site inspections, and so forth.

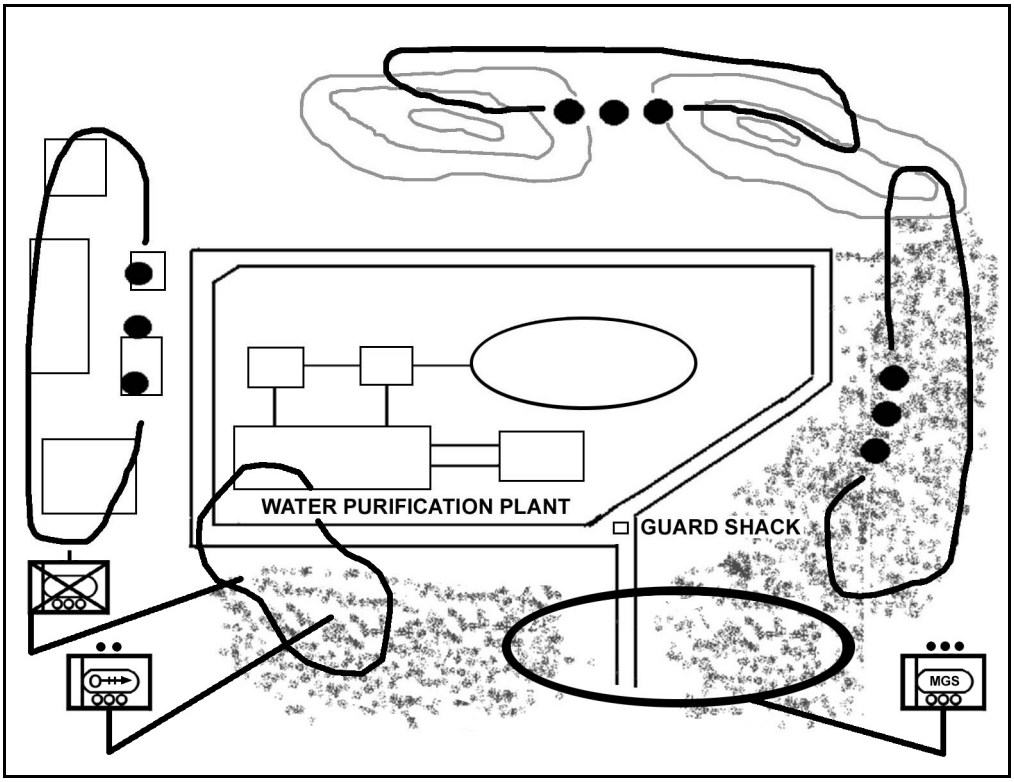

Figure 6-16. Perimeter defense of key terrain.

c. **Execution.** The SBCT infantry company commander normally deploys platoons in a perimeter around the objective in order to dominate key terrain and cover the mounted and dismounted avenues of approach into the objective. (See FM 7-10 for further information on perimeter defense.) The company emplaces machine guns and antitank weapons to cover the dismounted and mounted avenues of approach into the objective, respectively. It normally uses wire obstacles to restrict and deny entry into the objective area and uses antitank and command-detonated mines consistent with the ROE. Obstacles should be covered by fire and rigged with detection devices and trip flares. The company must be prepared to defend against a direct attack, such as a raid or sabotage against key facilities within the objective (water filtration system, pump station, and so forth). The commander must make an assessment as to the overall importance of the key facilities within the objective and prioritize security requirements. The company commander positions the 60-mm mortar section to provide 360-degree fire support and positions the AT section to engage vehicular targets. If the threat does not require the employment of mortars or AT weapons, the commander can give these sections other tasks.

d. **Other Considerations.** Depending on the mission requirements and threat, the SBCT infantry company commander may have to consider the need for the following:

- Artillery and attack helicopter support.
- ADA assets to defend against air attack.
- Engineer assets to construct obstacles.
- Interpreters to assist in the functioning of the facility and operation of the equipment.
- Military police (MP), civil affairs, and psychological operations (PSYOP) assets for civilian control and liaison.
- Coordination with local police and authorities.
- ICVs or MGSs to act as a mobile reserve or reaction force.

e. **Force Protection.** The SBCT infantry company may be required to conduct a perimeter defense as part of a force protection mission, such as defending a friendly base camp on urban terrain. The same techniques of establishing a perimeter defense described above are used. The company maintains the appropriate level of security (for example, 100 percent, 50 percent, or 30 percent), consistent with the commander's plan and the enemy situation. Additional tasks may include--

- Set up roadblocks and checkpoints.
- Search individuals and vehicles before they enter the camp.
- Maintain a presence as a show of force to the population outside the base camp.
- Conduct inner and outer security patrols.
- Clear urban terrain of any enemy that overwatches the base camp.
- Conduct ambushes to interdict any enemy forces moving toward the base camp.
- Restrict access to locations within the base camp and conduct surveillance of these locations from (or from within) adjacent structures or positions.
- Conduct reaction force duties inside and outside the perimeter of the camp.

6-19. DEFENSE OF AN URBAN STRONGPOINT

A company may be directed to construct a strongpoint as part of a battalion defense (Figure 6-17). In order to do so, it must be augmented with engineer support, more weapons, and CSS resources. A strong point is defended until the unit is formally ordered out of it by the commander directing the defense. Urban areas are easily converted to strongpoints. Stone, brick, or steel buildings provide cover and concealment. Buildings, sewers, and some streets provide covered and concealed routes and can be rubbled to provide obstacles, and telephone systems can provide communications.

a. The specific positioning of units in the strongpoint depends on the commander's mission analysis and estimate of the situation. The same considerations for a perimeter defense apply in addition to the following:

(1) Reinforce each individual fighting position (to include alternate and supplementary positions) to withstand small-arms fire, mortar fire, and artillery fragmentation. Stockpile food, water, ammunition, pioneer tools, and medical supplies in each fighting position.

(2) Support each individual fighting position with several others. Plan or construct covered and concealed routes between positions and along routes of supply and communication. Use these to support counterattack and maneuver within the strongpoint.

(3) Divide the strongpoint into several independent, but mutually supporting, positions or sectors. If one of the positions or sectors must be evacuated or is overrun, limit the enemy penetration with obstacles and fires and support a counterattack.

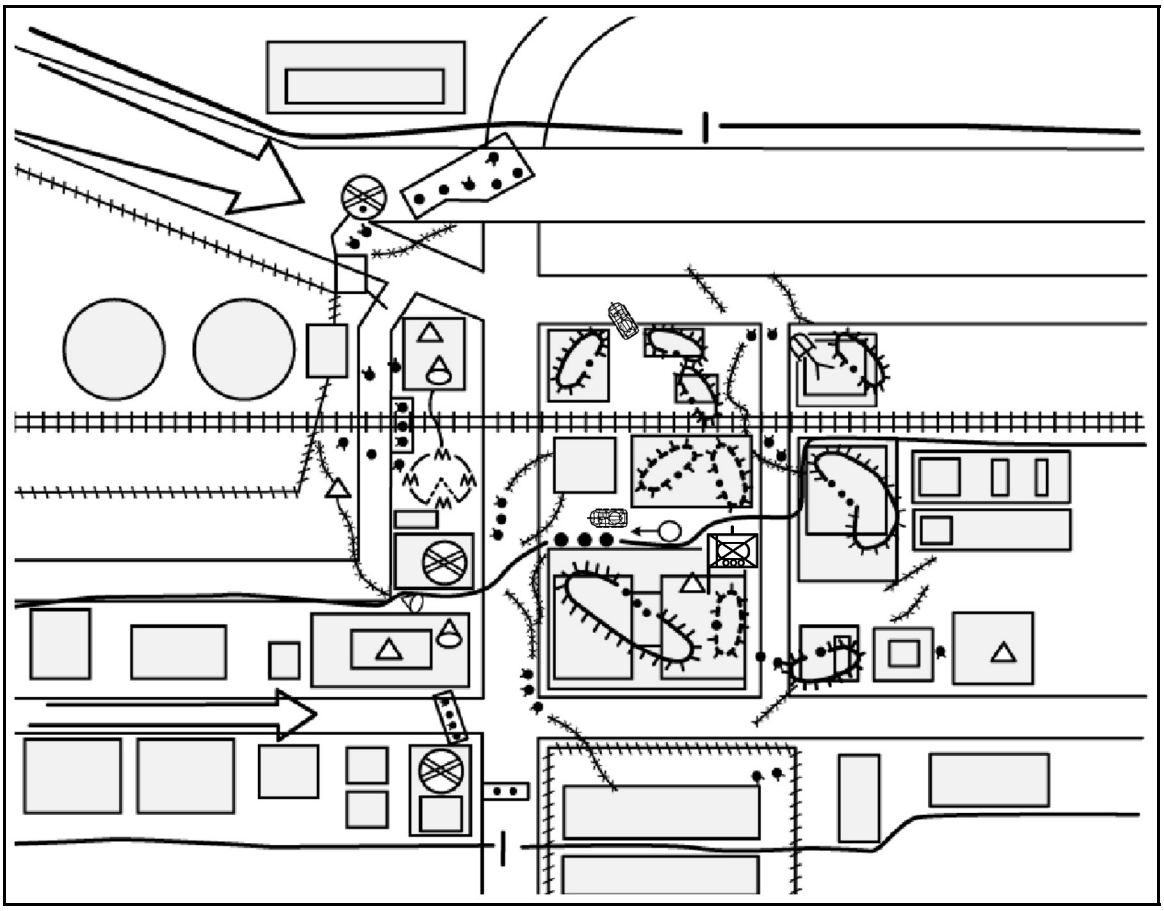

Figure 6-17. Urban strongpoint.

(4) Construct obstacles and minefields to disrupt and canalize enemy formations, to reinforce fires, and to protect the strongpoint from the assault. Place the obstacles and mines out as far as friendly units can observe them, within the strongpoint, and at points in between where they will be useful.

(5) Prepare range cards for each position and confirm them by fires. Plan indirect fires in detail and register them. Indirect fires should also be planned for firing directly on the strongpoint using proximity fuses.

(6) Plan and test several means of communication within the strongpoint and to higher headquarters to include radio, wire, messenger, pyrotechnics, and other signals.

(7) Improve or repair the strongpoint until the unit is relieved or withdrawn. More positions can be built, routes to other positions marked, existing positions improved or repaired, and barriers built or fixed.

b. A strong point may be part of any defensive plan. It may be built to protect vital units or installations, as an anchor around which more mobile units maneuver, or as part of a trap designed to destroy enemy forces that attack it.

6-20. DELAY

The intent of a delay is to slow the enemy, cause casualties, and stop him, where possible, without becoming decisively engaged. This procedure is done by defending, disengaging,

moving, and defending again. A company delay is normally conducted as part of the battalion task force's plan. The delay destroys enemy reconnaissance elements forward of the outskirts of the urban area, prevents the penetration of the urban area, and gains and maintains contact with the enemy to determine the strength and location of the main attack by trading space for time. Infantry companies are well suited for this operation, because they can take advantage of the cover and concealment provided by urban terrain and inflict casualties on the enemy at close range. Delays are planned by assigning platoon battle positions, platoon sectors, or both. Figure 6-18 depicts a company delay in urban terrain with the company commander assigning platoon battle positions. Routes are planned to each subsequent battle position or within the sector. Routes also are planned to take advantage of the inherent cover and concealment afforded by urban terrain, such as going through and hugging buildings, using shadows, subsurface areas, and so forth.

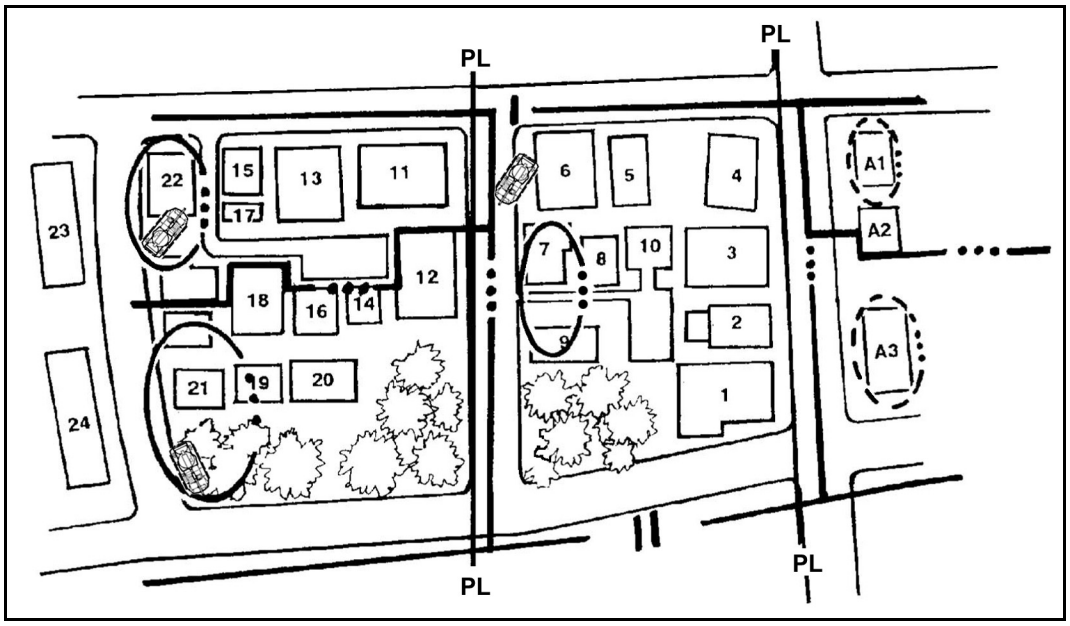

Figure 6-18. Company delay in an urban area.

a. The company's sector should be prepared with obstacles to increase the effect of the delay. Engineers prepare obstacles on main routes but avoid some covered and concealed routes that are known by the friendly troops for reinforcement, displacement, and resupply. These routes are destroyed and obstacles are executed when no longer needed.

b. Antiarmor weapon systems, MGS, ICVs, and other combat vehicles (tanks, BFVs) should be positioned on the outskirts of the urban area to destroy the enemy at maximum range. They should be located in defilade positions or in prepared shelters. They fire at visible targets and then fall back or proceed to alternate positions. Platoons should be assigned sectors from 100 to 300 meters (one to two blocks) wide. If available, they should be reinforced with sensors or GSRs, which can be emplaced on the outskirts or on higher ground to attain the maximum range in the assigned sector. Platoons delay by detecting the enemy early and inflicting casualties on him using patrols, OPs, and ambushes and by taking advantage of all obstacles. Each action is followed by a disengagement and withdrawal. Withdrawals occur on covered and concealed routes

through buildings or underground. By day, the defense is dispersed; at night, it is more concentrated. Close coordination and maintaining awareness of the current friendly and enemy situation are critical aspects of this operation.